UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

CERTIFIED MAIL 7008 3230 0000 3863 1666
RETURN RECEIPT REQUESTED

July 27, 2011

In Reply Refer To: CWA-309(a)-11-016 and 017

Andra Samoa, CEO
American Samoa Power Authority
P.O. Box PPB
Pago Pago, AS 96799

Dear Ms. Samoa:

Enclosed are two Administrative Orders issued today to the American Samoa Power Authority in order to resolve violations of the NPDES permits for the Tafuna and Utulei Sewage Treatment Plants by **June 30, 2013**. The Orders are identical, with identical schedules for each sewage treatment plant requiring (1) the installation of disinfection and de-chlorination, (2) expanded treatment plant self-monitoring, (3) spill reporting, and (4) an investigation of ways to increase the effectiveness of the deep-water outfalls. The key dates are as follows:

KEY DATES	ADMINISTRATIVE ORDER CWA-309(a)-11-016 for the TAFUNA STP
09/30/11	1. Submit a short response to the June 10, 2011 EPA inspection report.
10/01/11	6. Begin reporting sewage spills on the DMRs
12/01/11	7. Begin effluent sampling for nitrogen, phosphorus, turbidity, and ammonia.
04/30/12	2. Submit preliminary engineering plans for disinfection and de-chlorination.
04/30/12	5. Submit scoping summary of projects to increase the critical initial dilution factor.
06/30/13	3. Install and begin the use of disinfection and de-chlorination.
	8. Upon start-up begin effluent sampling for bacteria, and residual chlorine.
1st report due 02/28/12	12-14. Quarterly status reports and quarterly self-monitoring results. (due 02/28 for Oct-Dec, 05/30 for Jan-Mar, 08/30 for Apr-Jun, 11/30 for Jul-Sep)

KEY DATES	ADMINISTRATIVE ORDER CWA-309(a)-11-017 for the UTULEI STP
09/30/11	1. Submit a short response to the June 10, 2011 EPA inspection report.
10/01/11	6. Begin reporting sewage spills on the DMRs
12/01/11	7. Begin effluent sampling for nitrogen, phosphorus, turbidity, and ammonia.
04/30/12	2. Submit preliminary engineering plans for disinfection and de-chlorination.
04/30/12	5. Submit scoping summary of projects to increase the critical initial dilution factor.
06/30/13	3. Install and begin the use of disinfection and de-chlorination.
	8. Upon start-up begin effluent sampling for bacteria, and residual chlorine.
1st report due 02/28/12	12-14. Quarterly status reports and quarterly self-monitoring results. (due 02/28 for Oct-Dec, 05/30 for Jan-Mar, 08/30 for Apr-Jun, 11/30 for Jul-Sep)

The enclosed Orders and the findings that constitute the basis behind the Orders are issued pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act ("the Act") as amended [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)]. Sections 309(a), (b), (d), and (g) of the Act [33 U.S.C. Sections 1319(a), (b), (d) and (g)], provide administrative and/or judicial relief for failure to comply with the Clean Water Act. In addition, Section 309(c) of the Act [33 U.S.C. Section 1319(c)], provides criminal sanctions for negligent or knowing violations of the CWA and for knowingly making false statements.

The requests for information included in these Orders are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act because it is not an "information collection request" within the meaning of 44 U.S.C. Sections 3502(4), 3502(11), 3507, 3512, and 3518. Furthermore, it is exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons [44 U.S.C. Section 3502(4), 3502(11) and 5 CFR Section 1320.5(a)].

EPA has promulgated regulations to protect the confidentiality of the business information it receives. These regulations are set forth in 40 CFR Part 2, Subpart B and in the Federal Register at 41 F.R. 36902 (September 1, 1976) and 43 F.R. 40000 (September 8, 1978). A claim of business confidentiality may be asserted in the manner specified by 40 CFR Section 2.203(b) for part or all of the information requested. EPA will disclose business information covered by such a claim only as authorized under 40 CFR Part 2, Subpart B. If no claim accompanies the business information at the time EPA receives it, EPA may make it available to the public without further notice. The American Samoa Power Authority may not withhold from EPA any information on the grounds that it is confidential.

If you have any questions regarding this matter, please contact Greg V. Arthur of my staff at (415) 972-3504 or at arthur.greg@epa.gov.

Sincerely,

Original signed by:
Alexis Strauss

Alexis Strauss
Director, Water Division

Enclosure

cc: LCDR Matt Vojik, ASEPA
Brad Rea, ASPA Engineering

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 9

In the Matter of	)	
	)	
American Samoa Power Authority	)	FINDING OF VIOLATION
Tafuna Sewage Treatment Plant, Ocean Outfall,	)	
and Sewage Collection System	)	AND ORDER
NPDES Permit No. AS0020010	)	
	)	Docket No. CWA-309(a)-11-016
Proceedings under Section 308(a) and 309(a)(3),	)	
(a)(4) and (a)(5)(A) of the Clean Water Act, as	)	
amended, 33 U.S.C. Section 1318(a) and	)	
1319(a)(3), (a)(4) and (a)(5)(A)	)	

STATUTORY AUTHORITY

The following Finding of Violation and Administrative Order (Docket No. CWA-309(a)-11-016) is issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)] (hereinafter the Act). This authority has been delegated by the Administrator and the Regional Administrator of EPA Region 9 to the Director of the Water Division of EPA Region 9.

FINDING OF VIOLATION

The Director of the Water Division of EPA Region 9 finds that the American Samoa Power Authority, as the owner and operator of the Tafuna Sewage Treatment Plant, violated Section 301(a) of the Act [33 U.S.C. Section 1317(d)]. This Finding is made on the basis of the following facts:

1. The American Samoa Power Authority ("ASPA") owns the Fogagogo-Tafuna Sewage Treatment Plant ("Tafuna Sewage Treatment Plant"), the Tafuna ocean outfall, and the southwestern Tutuila Island sewer collection system ("Tafuna sewer system").

2. Section 301(a) of the Act [33 U.S.C. Section 1311(a)] prohibits the discharge of any pollutant by any person from a point source into waters of the United States except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with Section 402(a) of the Act [33 U.S.C. Section 1342]:
   a. Section 502(5) of the Act [33 U.S.C. Section 1362(5)] defines “person” to mean an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body;
   b. Section 502(6) of the Act [33 U.S.C. Section 1362(6)] defines “pollutant” to mean sewage, garbage, sewage sludge, rock, sand, chemical wastes, biological

materials, dredged spoil, solid waste, incinerator residue, munitions, radioactive materials, heat, wrecked or discarded equipment, cellar dirt, and industrial, municipal, and agricultural waste discharged into water;

c. Section 502(12) defines the term "discharge of pollutants" to mean any addition of any pollutant to navigable waters from any point source;

d. Section 502(7) defines the term "navigable waters" to mean the waters of the United States, including the territorial seas;

e. Section 502(14) defines "point source" to mean any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel, or other floating craft, from which pollutants are or may be discharged.

3. The American Samoa Government is a State, and is therefore a person within the meaning of Section 502(5) of the Act [33 U.S.C. Section 1362(5)], and thus subject to the provisions of the Act, [33 U.S.C. Section 1251 et seq].

4. The American Samoa Power Authority is a political subdivision of the State, and is therefore a person within the meaning of Section 502(5) of the Act [33 U.S.C. Section 1362(5)], and thus subject to the provisions of the Act, [33 U.S.C. Section 1251 et seq].

5. The Pacific Ocean is a water of the United States.

6. On September 28 and 29, 2010, EPA conducted a diagnostic evaluation inspection of the Tafuna Sewage Treatment Plant, and Tafuna sewer system, and determined the following:

a. Facility Description: The Tafuna Sewage Treatment Plant provides primary treatment and undisinfected discharge through an ocean outfall to the Pacific Ocean:

(1) The Tafuna Sewage Treatment Plant consist of grit removal channels, manual bar screens, a deep-well influent pump station, three clarigesters, sludge drying beds, on-site dried sludge stockpiles, and a deep-water ocean outfall into the Pacific Ocean at Vai Cove;

(2) The Tafuna sewer system has one main lift station and ten satellite lift stations that together feed collected sewage into the Tafuna Sewage Treatment Plant influent pump station;

(3) The average daily and maximum peak flows in 2010 of 1.94 and 5.3 mgd are approaching the as-built design dry-weather and daily peak design critieria of 2.16 mgd and 6.0 mgd, respectively, for the Tafuna Sewage Treatment Plant;

(4) The 1999 EPA final decision extending the 301(h) waivers and the 2009 EPA tentative decision denying the waivers cited the critical initial dilution factors to be 190:1 in 1999 and 187:1 in 2009 for the zone-of-initial-dilution established for the Tafuna ocean outfall.

b. Facility Operations: The Tafuna Sewage Treatment Plant accepts and handles the following domestic wastewaters:

(1) Domestic sewage collected into the Tafuna sewer system;
(2) Digested sewage from the Utulei Sewage Treatment Plant, trucked from Utulei to the Tafuna Sewage Treatment Plant sludge drying beds;
(3) Restaurant grease, collected island-wide from the school lunch program, and delivered by pumper truck to the Tafuna Sewage Treatment Plant for disposal into a dedicated clarigester.

7. EPA issued the NPDES permit No.AS0020010 for the Tafuna Sewage Treatment Plant to become effective on November 2, 1999 and to expire on November 1, 2004. The 1999 NPDES permit authorized the discharge of treated domestic sewage from the Tafuna Sewage Treatment Plant through the Tafuna ocean outfall into the Pacific Ocean at Vai Cove.

8. The Federal regulations in 40 CFR 122.21(d) allow the administrative extension of an NPDES permit if a permit application is submitted for renewal at least 180 days before it expires. ASPA submitted an application for permit renewal on May 4, 2004, before the 180 day deadline. Therefore the NPDES permit is administratively extended to be in effect beyond the November 1, 2004 permit expiration date.

9. The 1999 NPDES permit advances less-than-secondary technology-based limits (based on a 1999 EPA 301(h) waiver variance final decision), receiving water limitations, sludge limits, and self-monitoring requirements. The 2004 renewal application included a request to extend the section 301(h) variance waiver.

a. Effluent Limits: The less-than-secondary limits for BOD and TSS removal rates are based on a Federal minimum of 30% for primary treatment. The BOD and TSS concentration and loading limits reflect past performance data.

NPDES Permit No. AS0020010 - § A(1)	Tafuna STP Effluent Limits					Self-Monitoring	
	mo-av	7d-av	d-max	instant	geo-μ	frequency	type
flow (mgd)	-	-	-	-	-	continuous	flume
BOD (mg/l)	100	150	200	-	-	once/week inf and eff	8hr comp
BOD (lbs/day)	1669	2504	3338	-	-		
BOD (%removal)	>30%	-	-	-	-		
TSS (mg/l)	75	113	150	-	-	once/week inf and eff	8hr comp
TSS (lbs/day)	1252	1878	2504	-	-		
TSS (%removal)	>30%	-	-	-	-		
settleable solids (ml/l)	1.0	-	2.0	-	-	once/day	grab
pH (s.u.)	-	-	-	6.5-8.6	-	once/week	grab
oil and grease (mg/l)	-	-	-	-	-	quarterly	grab
toxicity (TUc)	-	-	-	-	-	quarterly	24hr comp

b. Receiving Water Limits: The permit establishes limits to apply at and beyond the Zone of Initial Dilution ("ZID") based on the American Samoa water quality standards for the Pacific Ocean at Vai Cove. The receiving water permit limits

are for discharges that cause water column samples taken at three depths (top, mid, bottom) from defined ZID water column sampling stations to exceed the standards. For turbidity, nutrients, chlorophyll-a, and enterococci, the receiving water permit limits are for discharges that cause averages (over the water column, ZID sampling locations, and a 12-month period) to exceed the standards.

NPDES Permit No.	Tafuna Outfall Water Column Limits					Self-Monitoring	
AS0020010 - § A(3), E(1)	mo-av	12m-av	d-max	instant	geo-μ	frequency	type
turbidity (NTU)	-	0.25	-	-	-	semi-annual	metering
total phosphorus (μg/l)	-	15	-	-	-	semi-annual	grab
total nitrogen (μg/l)	-	130	-	-	-	semi-annual	grab
chlorophyll-a (μg/l)	-	0.25	-	-	-	semi-annual	grab
light penetrate (ft-50%)	-	-	-	<130	-	semi-annual	secchi disk
dissolved oxygen (mg/l)	-	-	-	5.5	-	semi-annual	grab
pH (s.u.)	-	-	-	6.5-8.6	-	semi-annual	grab
ΔpH (s.u.)	-	-	-	≤ 0.2	-		
enterococci (cfu/100ml)	-	-	-	124	35	semi-annual	grab

Federal regulations require discharge outfalls for 301(h) permittees to ensure water quality standards are not exceeded at or beyond the zone of initial dilution (40 CFR 125.62(a)(1).

c. Federal Sludge Standards: The permit also establishes additional limits and monitoring requirements of the sediment, benthic communities, and sludge.

NPDES Permit No.	Federal Sewage Sludge Limits					Self-Monitoring	
AS0020010 - § D(1), D(10)	Table 1	Table 3				frequency	type
arsenic (mg/kg-dry)	75	41	-	-	-	annually	grab
cadmium (mg/kg-dry)	85	39	-	-	-	annually	grab
copper (mg/kg-dry)	4300	1500	-	-	-	annually	grab
lead (mg/kg-dry)	840	300	-	-	-	annually	grab
mercury (mg/kg-dry)	57	17	-	-	-	annually	grab
molybdenum (mg/kg-dry)	75	-	-	-	-	annually	grab
nickel (mg/kg-dry)	420	420	-	-	-	annually	grab
selenium (mg/kg-dry)	100	100	-	-	-	annually	grab
zinc (mg/kg-dry)	7500	2800	-	-	-	annually	grab

d. Sewage Spills: Section A(1)(a) of the NPDES permit requires all domestic sewage contributions into the Tafuna sewer system to be discharged only through the Tafuna ocean outfall.

10. On January 14, 2009, EPA issued a Tentative Decision Document denying the 301(h) variance from the secondary treatment requirements in the next NPDES permit. A Final Decision Document has not been issued as of yet.

11. The American Samoa Power Authority, as owner and operator of the Tafuna Sewage Treatment Plant, violated Section 301(a) of the Act [33 U.S.C. Section 1311(a)], in that:

a. ASPA submits receiving water quality monitoring reports for the Tafuna Sewage Treatment Plant ocean outfall at least twice per year, in the spring/summer non-trade wind season, and in the fall/winter trade wind season;

b. As documented in the June 10, 2011 EPA inspection report for the ASPA wastewater systems:
   (1) EPA compared the 2005-2010 water column sampling results for the two Tafuna ocean outfall Zone-of-Initial-Dilution ("Tafuna ZID") sampling stations designated in the NPDES permit with those from a reference sampling station also designated in the permit;
   (2) EPA determined that the water quality standards are not consistently met at the Tafuna ZID boundaries for total nitrogen, total phosphorus, chlorophyll-a, and enterococci;
   (3) EPA determined that there are statistically significant increases in the enterococci levels between the Tafuna ZID sampling stations and the reference station;
   (4) Therefore EPA also determined that the discharge from the Tafuna sewage treatment plant is a likely cause or contributing source of the elevated enterococci levels in the receiving waters above the water quality standards.

c. In 2006-2010, the discharge from the Tafuna Sewage Treatment Plant ocean outfall violated the prohibitions in Section A(3) of the NPDES permit on 28 occasions accounting for 61 days of violation, as listed in Table 1 on the next page of this Finding of Violation.

d. As documented in the June 10, 2011 EPA inspection report for the ASPA waste-water systems, the ASPA daily work history for 2010 recorded the occurrence of spills from sewer line back-ups and line breaks. These sewer spills violated the prohibitions in Sections A(1)(a) of the NPDES permits for the Tafuna and Utulei Sewage Treatment Plants on 15 occasions accounting for 15 days of violations.

12. The June 10, 2011 EPA report of the September 28-29, 2010 inspection of the ASPA Sewage Treatment Works on Tutuila Island is by reference made part of this Order.

Table 1 - Tafuna STP
NPDES Permit No. AS0020010 Receiving Water Column Violations

2006 - 2010 Tafuna Sewage Treatment Plant Self-Monitoring Results					Permit Violations	
Sampling Date	Location	Sample Type	The discharge shall not cause …		Violation	Days
Feb/Oct 2010	ZID A1/A2-all	geo-µ comps	§A(3)(j) enterococci geo-µ	35 CFU/100 ml	187	12
Feb/May 2008	ZID A1/A2-all	geo-µ comps	§A(3)(j) enterococci geo-µ	35 CFU/100 ml	64	12
Feb/Sep 2007	ZID A1/A2-all	geo-µ comps	§A(3)(j) enterococci geo-µ	35 CFU/100 ml	76	12
Oct 2010	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	959	1
Oct 2010	ZID A1-mid	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	691	1
Oct 2010	ZID A1-bot	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	959	1
Oct 2010	ZID A2-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	907	1
Oct 2010	ZID A2-mid	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	393	1
Feb 2010	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	1782	1
Feb 2010	ZID A2-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	987	1
Sep 2009	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	504	1
Sep 2009	ZID A2-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	3654	1
Sep 2009	ZID A2-bot	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	185	1
Feb 2009	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	2481	1
Feb 2010	ZID A2-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	1565	1
May 2008	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	1989	1
May 2008	ZID A1-mid	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	1100	1
May 2008	ZID A2-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	2755	1
May 2008	ZID A2-mid	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	269	1
Feb 2008	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	2481	1
Feb 2008	ZID A2-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	1565	1
Sep 2007	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	2723	1
Sep 2007	ZID A1-mid	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	2359	1
Feb 2007	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	7701	1
Feb 2007	ZID A1-bot	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	161	1
Feb 2007	ZID A2-mid	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	223	1
Nov 2006	ZID A1-top	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	12031	1
Nov 2006	ZID A1-bot	single grab	§A(3)(j) enterococci grab	124 CFU/100 ml	187	1

ADMINISTRATIVE ORDER

Taking these Findings into consideration and considering the potential environmental and human health effects of the violations and all good faith efforts to comply, EPA has determined that compliance in accordance with the following requirements is reasonable. Pursuant to Section 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Act [33 U.S.C. Section 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)], IT IS HEREBY ORDERED that the American Samoa Power Authority comply with the following requirements:

Submission of Information

1. By **SEPTEMBER 30, 2011**, the American Samoa Power Authority shall submit short responses to the findings in Sections 2.0, 3.0, 4.0, 4.1, 4.2, 4.3, 4.4, and 4.5 of the June 10, 2011 EPA inspection report.

Disinfection and De-chlorination

2. By **APRIL 30, 2012**, ASPA shall submit a preliminary engineering plan for the steps to be taken in order to provide disinfection and de-chlorination (if necessary) of the primary treated effluent discharges from the Tafuna Sewage Treatment Plant into the Pacific Ocean through the Tafuna ocean outfall. This preliminary engineering plan shall include:
   a. A detailed description of all plant, equipment, hardware, management plans, and operating procedures to be used to provide disinfection of the primary treated effluent discharges from the Tafuna Sewage Treatment Plant;
   b. A detailed description of all plant, equipment, hardware, management plans and operating procedures to be used to provide de-chlorination of chlorinated effluent discharges from the Tafuna Sewage Treatment Plant;
   c. A description of the training needs for prospective operators of the disinfection and de-chlorination steps;
   d. An estimate of the capital and training costs;
   e. A schedule of all steps, outlined in Items 2(a), 2(b), and 2(c) above, not to extend beyond **June 30, 2013**.

3. By **JUNE 30, 2013**, ASPA shall (1) complete the steps (required in Item 2 above) necessary to provide disinfection and de-chlorination of the primary treated effluent discharges from the Tafuna Sewage Treatment Plant into the Pacific Ocean through the Tafuna ocean outfall, and (2) submit a Notice of Completion.

4. By **JUNE 30, 2013**, ASPA shall achieve consistent compliance with the receiving water limits for enterococci in Section A(3) of the NPDES permit for the Tafuna Sewage Treatment Plant, and with an interim limit of 0.1 mg/l residual chlorine.

Critical Initial Dilution Factor

5. By **APRIL 30, 2012**, ASPA shall submit a scoping summary of projects that could be taken in order to optimally increase the critical initial dilution factor for the Tafuna ocean outfall discharge. For each project, this scoping summary shall include a description of the project, the resulting estimated mean and peak discharge flow rates (if any), the estimated capital cost of the project, and a construction schedule not to extend beyond **June 30, 2013**. At a minimum, this scoping summary shall cover the following projects:
   a. A reduction in the expected daily-maximum mean and peak discharge flow rates through infiltration and inflow upgrades to the sewer system;
   b. A reduction in the expected daily-maximum mean and peak discharge flow rates through increases in sewer system storage capacities and optimized delivery;
   c. A reduction in the expected daily-maximum mean and peak discharge flow rate through the installation and operation of on-site wet-weather storage;
   d. A doubling of the diffuser length of the Tafuna ocean outfall;
   e. Any other project to increase the size of the zone of initial dilution.

Additional Self-Monitoring

6. **FROM OCTOBER 1, 2011** through the reissuance of the NPDES permit, ASPA shall report all sewage spills from the Tafuna sewer system. The sewage spill reports shall be submitted as an attachment to the Discharge Monitoring Reports required by the NPDES permit, and include the date, volume, duration, cause, and destination of the spills.

7. **ONCE EACH MONTH** from **December 1, 2011** through the reissuance of the NPDES permit, ASPA shall self-monitor the Tafuna Sewage Treatment Plant, for total nitrogen (influent and effluent), total phosphorus (influent and effluent), ammonia (influent and effluent), and turbidity (effluent only).

8. **ONCE EACH MONTH** from the start-up date of the disinfection required in Items 2 and 3 of this Order, through the reissuance of the NPDES permit, ASPA shall self-monitor the Tafuna Sewage Treatment Plant, for enterococci (effluent only), and residual chlorine (effluent only).

9. ASPA shall self-monitor and analyze using the sampling protocols listed below, and the EPA approved analytical methods in 40 CFR 136 (or equivalent) necessary to achieve the detection limits indicated below:

Pollutants	Sampling Location	Method Protocols	Detection Limits
total nitrogen	Tafuna STP influent and effluent	8-hour composite	0.1 mg/l
total phosphorus	Tafuna STP influent and effluent	8-hour composite	0.1 mg/l
ammonia	Tafuna STP influent and effluent	8-hour composite	0.1 mg/l as N
turbidity	Tafuna STP effluent	grab	1 NTU
enterococci	Tafuna STP effluent	grab	10 CFU/100 ml
residual chlorine	Tafuna STP effluent	grab	0.01 mg/l

10. For each sample and measurement, ASPA shall record the following:
    a. the sample or measurement results,
    b. the EPA analytical methods used,
    c. the date, and time of sampling, and sampling point,
    d. the type of sample (ie. 24-hour composite, grab, or manual composite), and
    e. the name of the laboratory used.

11. The monthly self-monitoring required in Items 7 and 8 of this Order is in addition to the self-monitoring requirements of Sections A(1) and E(1) of NPDES Permit No. AS0020010.

Quarterly Status Reports

12. **WITHIN TWO MONTHS** after the end of a quarter through June 30, 2013, ASPA shall submit a written quarterly status report that documents the status of the work required under the following items:

    a. Items 2 and 3 - The installation of disinfection and de-chlorination;
    b. Item 5 - The scoping of potential critical initial dilution projects.

    The quarterly status reports shall also contain any Notices to Proceed and Notices of Completion issued during the quarter.

13. **WITHIN TWO MONTHS** after the end of a quarter through the reissuance of the NPDES permit, ASPA shall submit all self-monitoring results for the previous quarter as required in Items 7 and 8 of this Order.

14. The first quarter status reports for October to December will be due on **February 28th**. Second quarter reports for January to March will be due on **May 30th**. Third quarter reports for April to June will be due on **August 30th**. Fourth quarter reports for July to September will be due on **November 30th**.

15. All reports submitted pursuant to this Order shall be signed by a principal executive officer of the American Samoa Power Authority or by a representative of the American Samoa Office of the Governor, and shall include the following self-certifying statement:

    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, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

16. This Order is not and shall not be interpreted to be an NPDES permit under Section 402 of the Act [33 U.S.C. Section 1342], nor shall it in any way relieve the American Samoa Power Authority of obligations imposed by the Act, or any other Federal, State or local law.

17. All submittals shall be mailed to the following addresses:

U.S. ENVIRONMENTAL PROTECTION AGENCY
75 Hawthorne Street
San Francisco, California 94105
Attn: Greg V. Arthur (WTR-7)

AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY
P.O. Box PPA
Pago Pago, American Samoa 96799
Attn: LCDR Matt Vojik

18. This Order takes effect upon the date of receipt.

Original signed by:
Alexis Strauss

Alexis Strauss
Director, Water Division

July 27, 2011
Dated

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 9

In the Matter of	)	
	)	
American Samoa Power Authority	)	FINDING OF VIOLATION
Utulei Sewage Treatment Plant, Ocean Outfall,	)	
and Sewage Collection System	)	AND ORDER
NPDES Permit No. AS0020001	)	
	)	Docket No. CWA-309(a)-11-017
Proceedings under Section 308(a) and 309(a)(3),	)	
(a)(4) and (a)(5)(A) of the Clean Water Act, as	)	
amended, 33 U.S.C. Section 1318(a) and	)	
1319(a)(3), (a)(4) and (a)(5)(A)	)	

STATUTORY AUTHORITY

The following Finding of Violation and Administrative Order (Docket No. CWA-309(a)-11-017) is issued under the authority vested in the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Sections 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Clean Water Act [33 U.S.C. Sections 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)] (hereinafter the Act). This authority has been delegated by the Administrator and the Regional Administrator of EPA Region 9 to the Director of the Water Division of EPA Region 9.

FINDING OF VIOLATION

The Director of the Water Division of EPA Region 9 finds that the American Samoa Power Authority, as the owner and operator of the Utulei Sewage Treatment Plant, violated Section 301(a) of the Act [33 U.S.C. Section 1317(d)]. This Finding is made on the basis of the following facts:

1. The American Samoa Power Authority ("ASPA") owns the Utulei Sewage Treatment Plant, the Utulei ocean outfall, and the Pago Pago harbor area sewer collection system ("Utulei sewer system").

2. Section 301(a) of the Act [33 U.S.C. Section 1311(a)] prohibits the discharge of any pollutant by any person from a point source into waters of the United States except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with Section 402(a) of the Act [33 U.S.C. Section 1342]:

    a. Section 502(5) of the Act [33 U.S.C. Section 1362(5)] defines “person” to mean an individual, corporation, partnership, association, State, municipality, commission, or political subdivision of a State, or any interstate body;

b. Section 502(6) of the Act [33 U.S.C. Section 1362(6)] defines "pollutant" to mean sewage, garbage, sewage sludge, rock, sand, chemical wastes, biological materials, dredged spoil, solid waste, incinerator residue, munitions, radioactive materials, heat, wrecked or discarded equipment, cellar dirt, and industrial, municipal, and agricultural waste discharged into water;

c. Section 502(12) defines the term "discharge of pollutants" to mean any addition of any pollutant to navigable waters from any point source;

d. Section 502(7) defines the term "navigable waters" to mean the waters of the United States, including the territorial seas;

e. Section 502(14) defines "point source" to mean any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel, or other floating craft, from which pollutants are or may be discharged.

3. The American Samoa Government is a State, and is therefore a person within the meaning of Section 502(5) of the Act [33 U.S.C. Section 1362(5)], and thus subject to the provisions of the Act, [33 U.S.C. Section 1251 et seq].

4. The American Samoa Power Authority is a political subdivision of the State, and is therefore a person within the meaning of Section 502(5) of the Act [33 U.S.C. Section 1362(5)], and thus subject to the provisions of the Act, [33 U.S.C. Section 1251 et seq].

5. The Pacific Ocean is a water of the United States.

6. On September 28 and 29, 2010, EPA conducted a diagnostic evaluation inspection of the Utulei Sewage Treatment Plant, and Utulei sewer system, and determined the following:

a. Facility Description: The Utulei Sewage Treatment Plant provides primary treatment and undisinfected discharge through an ocean outfall to Pago Pago Harbor:

(1) The Utulei Sewage Treatment Plant consist of a manual bar screen dropped into a deep-well influent pump station, a flow splitter box, four clarigesters, a decommissioned chlorine contact outlet structure, and a deep-water ocean outfall into outer Pago Pago Harbor;

(2) The Utulei sewer system has one main lift station and seven satellite lift stations that together feed collected sewage into the Utulei Sewage Treatment Plant influent pump station;

(3) The average daily and maximum peak flows in 2010 of 1.21 and 4.4 mgd are not approaching the as-built design dry-weather and daily peak design critieria of 2.21 mgd and 6.0 mgd, respectively, for the Utulei Sewage Treatment Plant;

(4) The 1999 EPA final decision extending the 301(h) waivers and the 2009 EPA tentative decision denying the waivers cited the critical initial dilution factors to be 202:1 in 1999 and 90:1 in 2009 for the zone-of-initial-dilution established for the Utulei ocean outfall.

b. Facility Operations: The Utulei Sewage Treatment Plant accepts and handles only domestic sewage collected into the Utulei sewer system. Digested sludge is trucked to the Tafuna Sewage Treatment Plant sludge drying beds.

7. EPA issued the NPDES permit No.AS0020001 for the Utulei Sewage Treatment Plant to become effective on October 9, 2001 and to expire on October 9, 2006. The 2001 NPDES permit authorized the discharge of treated domestic sewage from the Utulei Sewage Treatment Plant through the Utulei ocean outfall into outer Pago Pago Harbor.

8. The Federal regulations in 40 CFR 122.21(d) allow the administrative extension of an NPDES permit if a permit application is submitted for renewal at least 180 days before it expires. ASPA submitted an application for permit renewal on April 11, 2006, before the 180 day deadline. Therefore the NPDES permit is administratively extended to be in effect beyond the October 9, 2006 permit expiration date.

9. The 2001 NPDES permit advances less-than-secondary technology-based limits (based on a 1999 EPA 301(h) waiver variance final decision), receiving water limitations, sludge limits, and self-monitoring requirements. The 2006 renewal application included a request to extend the section 301(h) variance waiver.

a. Effluent Limits: The less-than-secondary limits for BOD and TSS removal rates are based on a Federal minimum of 30% for primary treatment. The BOD and TSS concentration and loading limits reflect past performance data.

NPDES Permit No. AS0020001 - § A(1)	Utulei STP Effluent Limits					Self-Monitoring	
	mo-av	7d-av	d-max	instant	geo-μ	frequency	type
flow (mgd)	-	-	-	-	-	continuous	flume
BOD (mg/l)	78.3	117	157	-	-	once/week inf and eff	8hr comp
BOD (lbs/day)	1085	1628	2170	-	-		
BOD (%removal)	>30%	-	-	-	-		
TSS (mg/l)	75	113	150	-	-	once/week inf and eff	8hr comp
TSS (lbs/day)	1377	2065	2754	-	-		
TSS (%removal)	>30%	-	-	-	-		
settleable solids (ml/l)	1.0	-	2.0	-	-	once/day	grab
pH (s.u.)	-	-	-	6.5-8.6	-	once/week	grab
oil and grease (mg/l)	-	-	-	-	-	quarterly	grab
toxicity (TUc)	-	-	-	-	-	quarterly	24hr comp

b. Receiving Water Limits: The permit establishes limits to apply at and beyond the Zone of Initial Dilution ("ZID") based on the American Samoa water quality standards for Pago Pago Harbor. The receiving water permit limits are for discharges that cause water column samples taken at three depths (top, mid, bottom) from defined ZID water column sampling stations to exceed the standards. For turbidity, nutrients, chlorophyll-a, and enterococci, the receiving water permit

limits are for discharges that cause averages (over the water column, ZID sampling locations, and a 12-month period) to exceed the standards.

NPDES Permit No. AS0020001 - § A(3), E(1)	Utulei Outfall Water Column Limits					Self-Monitoring	
	mo-av	12m-av	d-max	Instant	geo-μ	frequency	type
turbidity (NTU)	-	0.75	-	-	-	semi-annual	metering
total phosphorus (μg/l)	-	30	-	-	-	semi-annual	grab
total nitrogen (μg/l)	-	200	-	-	-	semi-annual	grab
chlorophyll-a (μg/l)	-	1.0	-	-	-	semi-annual	grab
light penetrate (ft-50%)	-	-	-	<65	-	semi-annual	secchi disk
dissolved oxygen (mg/l)	-	-	-	5.0	-	semi-annual	grab
pH (s.u.)	-	-	-	6.5-8.6	-	semi-annual	grab
ΔpH (s.u.)	-	-	-	≤ 0.2	-		
enterococci (cfu/100ml)	-	-	-	104	35	semi-annual	grab

Federal regulations require discharge outfalls for 301(h) permittees to ensure water quality standards are not exceeded at or beyond the zone of initial dilution (40 CFR 125.62(a)(1).

c. Sewage Spills: Section A(1)(a) of the NPDES permit requires all domestic sewage contributions into the Utulei sewage collection systems to be discharged only through the Utulei ocean outfall.

10. On January 14, 2009, EPA issued a Tentative Decision Document denying the 301(h) variance from the secondary treatment requirements in the next NPDES permit. A Final Decision Document has not been issued as of yet.

11. The American Samoa Power Authority, as owner and operator of the Utulei Sewage Treatment Plant, violated Section 301(a) of the Act [33 U.S.C. Section 1311(a)], in that:

a. ASPA submits receiving water quality monitoring reports for the Utulei Sewage Treatment Plant ocean outfall at least twice per year, in the spring/summer non-trade wind season, and in the fall/winter trade wind season;

b. As documented in the June 10, 2011 EPA inspection report for the ASPA wastewater systems:
   (1) EPA compared the 2005-2010 water column sampling results for the two Utulei ocean outfall Zone-of-Initial-Dilution ("Utulei ZID") sampling stations designated in the NPDES permit with those from a reference sampling station also designated in the permit;
   (2) EPA determined that the water quality standards are not consistently met at the Utulei ZID boundaries for total nitrogen, and enterococci;
   (3) EPA determined that there are statistically significant increases in the enterococci levels between the Utulei ZID sampling stations and the reference station;

(4) Therefore EPA also determined that the discharge from the Utulei Sewage Treatment Plant is a likely cause or contributing source of the elevated enterococci levels in the receiving waters above the water quality standards.

c. In 2006-2010, the discharge from the Utulei Sewage Treatment Plant ocean outfall violated the prohibitions in Section A(3) of the NPDES permit on 15 occasions accounting for 26 days of violation, as listed in Table 1 below.

d. As documented in the June 10, 2011 EPA inspection report for the ASPA wastewater systems, the ASPA daily work history for 2010 recorded the occurrence of spills from sewer line back-ups and line breaks. These sewer spills violated the prohibitions in Sections A(1)(a) of the NPDES permits for the Tafuna and Utulei Sewage Treatment Plants on 15 occasions accounting for 15 days of violations.

12. The June 10, 2011 EPA report of the September 28-29, 2010 inspection of the ASPA Sewage Treatment Works on Tutuila Island is by reference made part of this Order.

Table 1 - Utulei STP
NPDES Permit No. AS0020001 Receiving Water Column Violations

2006 - 2010 Utulei Sewage Treatment Plant Self-Monitoring Results					Permit Violations	
Sampling Date	Location	Sample Type	The discharge shall not cause …		Violation	Days
Feb/Oct 2010	ZID A1/A2-all	geo-μ comps	§A(3)(j) enterococci geo-μ	35 CFU/100 ml	47	12
Oct 2010	ZID B1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	573	1
Feb 2010	ZID A1-top	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	2098	1
Feb 2010	ZID B1-top	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	1607	1
Feb 2010	ZID B1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	1106	1
Feb 2009	ZID A1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	213	1
Sep 2008	ZID B1-top	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	529	1
May 2008	ZID A1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	1043	1
May 2008	ZID B1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	246	1
Sep 2007	ZID A1-top	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	121	1
Sep 2007	ZID B1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	341	1
Feb 2007	ZID A1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	591	1
Nov 2006	ZID A1-top	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	171	1
Nov 2006	ZID B1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	223	1
Feb 2006	ZID B1-mid	single grab	§A(3)(j) enterococci grab	104 CFU/100 ml	197	1

ADMINISTRATIVE ORDER

Taking these Findings into consideration and considering the potential environmental and human health effects of the violations and all good faith efforts to comply, EPA has determined that compliance in accordance with the following requirements is reasonable. Pursuant to Section 308(a) and 309(a)(3), (a)(4) and (a)(5)(A) of the Act [33 U.S.C. Section 1318(a) and 1319(a)(3), (a)(4) and (a)(5)(A)], IT IS HEREBY ORDERED that the American Samoa Power Authority comply with the following requirements:

Submission of Information

2. By **SEPTEMBER 30, 2011**, the American Samoa Power Authority shall submit short responses to the findings in Sections 2.0, 3.0, 4.0, 4.1, 4.2, 4.3, 4.4, and 4.5 of the June 10, 2011 EPA inspection report.

Disinfection and De-chlorination

2. By **APRIL 30, 2012**, ASPA shall submit a preliminary engineering plan for the steps to be taken in order to provide disinfection and de-chlorination (if necessary) of the primary treated effluent discharges from the Utulei Sewage Treatment Plant into Pago Pago Harbor through the Utulei ocean outfall. This preliminary engineering plan shall include:
   a. A detailed description of all plant, equipment, hardware, management plans, and operating procedures to be used to provide disinfection of the primary treated effluent discharges from the Utulei Sewage Treatment Plant;
   b. A detailed description of all plant, equipment, hardware, management plans and operating procedures to be used to provide de-chlorination of chlorinated effluent discharges from the Utulei Sewage Treatment Plant;
   c. A description of the training needs for prospective operators of the disinfection and de-chlorination steps;
   d. An estimate of the capital and training costs;
   e. A schedule of all steps, outlined in Items 2(a), 2(b), and 2(c) above, not to extend beyond **June 30, 2013**.

3. By **JUNE 30, 2013**, ASPA shall (1) complete the steps (required in Item 2 above) necessary to provide disinfection and de-chlorination of the primary treated effluent discharges from the Utulei Sewage Treatment Plant into Pago Pago Harbor through the Utulei ocean outfall, and (2) submit a Notice of Completion.

4. By **JUNE 30, 2013**, ASPA shall achieve consistent compliance with the receiving water limits for enterococci in Section A(3) of the NPDES permit for the Utulei Sewage Treatment Plant, and with an interim limit of 0.1 mg/l residual chlorine.

Critical Initial Dilution Factor

5. By **APRIL 30, 2012**, ASPA shall submit a scoping summary of projects that could be taken in order to optimally increase the critical initial dilution factor for the Utulei ocean outfall discharge. For each project, this scoping summary shall include a description of the project, the resulting estimated mean and peak discharge flow rates (if any), the estimated capital cost of the project, and a construction schedule not to extend beyond **June 30, 2013**. At a minimum, this scoping summary shall cover the following projects:
   a. A reduction in the expected daily-maximum mean and peak discharge flow rates through infiltration and inflow upgrades to the sewer system;
   b. A reduction in the expected daily-maximum mean and peak discharge flow rates through increases in sewer system storage capacities and optimized delivery;
   c. A reduction in the expected daily-maximum mean and peak discharge flow rates through the installation and operation of on-site wet-weather storage;
   d. A doubling of the diffuser length of the Utulei ocean outfall;
   e. Any other project to increase the size of the zone of initial dilution.

Additional Self-Monitoring

6. **FROM OCTOBER 1, 2011** through the reissuance of the NPDES permit, ASPA shall report all sewage spills from the Utulei sewer system. The sewage spill reports shall be submitted as an attachment to the Discharge Monitoring Reports required by the NPDES permit, and include the date, volume, duration, cause, and destination of the spills.

7. **ONCE EACH MONTH** from **December 1, 2011** through the reissuance of the NPDES permit, ASPA shall self-monitor the Utulei Sewage Treatment Plant, for total nitrogen (influent and effluent), total phosphorus (influent and effluent), ammonia (influent and effluent), and turbidity (effluent only).

8. **ONCE EACH MONTH** from the start-up date of the disinfection required in Items 2 and 3 of this Order, through the reissuance of the NPDES permit, ASPA shall self-monitor the Utulei Sewage Treatment Plant, for enterococci (effluent only), and residual chlorine (effluent only).

9. ASPA shall self-monitor and analyze using the sampling protocols listed below, and the EPA approved analytical methods in 40 CFR 136 (or equivalent) necessary to achieve the detection limits indicated below:

Pollutants	Sampling Location	Method Protocols	Detection Limits
total nitrogen	Utulei STP influent and effluent	8-hour composite	0.1 mg/l
total phosphorus	Utulei STP influent and effluent	8-hour composite	0.1 mg/l
ammonia	Utulei STP influent and effluent	8-hour composite	0.1 mg/l as N
turbidity	Utulei STP effluent	Grab	1 NTU
enterococci	Utulei STP effluent	Grab	10 CFU/100 ml
residual chlorine	Utulei STP effluent	Grab	0.01 mg/l

10. For each sample and measurement, ASPA shall record the following:
    a. the sample or measurement results,
    b. the EPA analytical methods used,
    c. the date, and time of sampling, and sampling point,
    d. the type of sample (ie. 24-hour composite, grab, or manual composite), and
    e. the name of the laboratory used.

11. The monthly self-monitoring required in Items 7 and 8 of this Order is in addition to the self-monitoring requirements of Sections A(1) and E(1) of NPDES Permit No. AS0020001.

Quarterly Status Reports

12. **WITHIN TWO MONTHS** after the end of a quarter through June 30, 2013, the ASPA shall submit a written quarterly status report that documents the status of the work required under the following items:

    a. Items 2 and 3 - The installation of disinfection and dechlorination;
    b. Item 4 - The scoping of potential critical initial dilution projects.

    The quarterly status reports shall also contain any Notices to Proceed and Notices of Completion issued during the quarter.

13. **WITHIN TWO MONTHS** after the end of a quarter through the reissuance of the NPDES permit, ASPA shall submit all self-monitoring results for the previous quarter as required in Items 7 and 8 of this Order.

14. The first quarter status reports for October to December will be due on **February 28th**. Second quarter reports for January to March will be due on **May 30th**. Third quarter reports for April to June will be due on **August 30th**. Fourth quarter reports for July to September will be due on **November 30th**.

15. All reports submitted pursuant to this Order shall be signed by a principal executive officer of the American Samoa Power Authority or by a representative of the American Samoa Office of the Governor, and shall include the following self-certifying statement:

    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, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that all wastewater samples analyzed and reported herein are representative of the ordinary process wastewater flow from this facility. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

16. This Order is not and shall not be interpreted to be an NPDES permit under Section 402 of the Act [33 U.S.C. Section 1342], nor shall it in any way relieve the American Samoa Power Authority of obligations imposed by the Act, or any other Federal, State or local law.

17. All submittals shall be mailed to the following addresses:

U.S. ENVIRONMENTAL PROTECTION AGENCY
75 Hawthorne Street
San Francisco, California 94105
Attn: Greg V. Arthur (WTR-7)

AMERICAN SAMOA ENVIRONMENTAL PROTECTION AGENCY
P.O. Box PPA
Pago Pago, American Samoa 96799
Attn: LCDR Matt Vojik

18. This Order takes effect upon the date of receipt.

Original signed by:
Alexis Strauss

Alexis Strauss
Director, Water Division

July 27, 2011
Dated