UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

In Re:

AMERICAN SAMOA POWER AUTHORITY'S APPLICATION FOR A RENEWED MODIFIED NPDES PERMIT UNDER SECTION 301(h) OF THE CLEAN WATER ACT FOR THE UTULEI SEWAGE TREATMENT PLANT	FINAL DECISION OF THE REGIONAL ADMINISTRATOR PURSUANT TO 40 CFR 125, SUBPART G

It is my final decision to grant the request by the American Samoa Power Authority for a renewal of the modified National Pollutant Discharge Elimination System (NPDES) permit under Section 301(h) of the Clean Water Act. Section 301(h) provides for variances from the secondary treatment requirements of the Clean Water Act. The basis for this decision is described in the NPDES permit Fact Sheet for the Utulei Sewage Treatment Plant.

Because my decision is based on available evidence specific to this particular discharge, it is not intended to assess the need for secondary treatment in general, nor does it reflect on the necessity for secondary treatment by other publicly owned treatment works discharging to the marine environment. This decision and the NPDES permit implementing this decision are subject to revision on the basis of subsequently acquired information relating to the impacts of the less-than-secondary discharge on the marine environment.

The EPA received the American Samoa Power Authority's renewal application for a variance from secondary treatment on March 26, 1991. This application was based on an altered discharge, as defined at 40 CFR 125.58(b). A revised application based on an improved discharge was submitted to the EPA on January 8, 1996. A tentative decision to approve the application was issued by the EPA on April 9, 2001. A 30-day public comment period was held for the Utulei Sewage Treatment Plant during which no comments were received.

The permit shall be issued upon the date of signature by the EPA (October 4, 2001) and shall become effective on October 9, 2001, unless there is a written request for an evidentiary hearing under 40 CFR 124.74. Any request for an evidentiary hearing must be submitted within 33 days of the date of this letter. All written requests for an evidentiary hearing should be addressed to: Regional Administrator, U.S. Environmental Protection Agency, Region IX; ATTN: Permits Record Coordinator, W-5; 75 Hawthorne Street; San Francisco, CA 94105-3901.

Dated: 5 October 2001

for Laura Yoshii
Acting Regional Administrator

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U. S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105-3901

FACT SHEET
301(h) FINAL DECISION AND PERMIT

Authorization to Discharge under the
National Pollutant Discharge Elimination System
for the
American Samoa Power Authority
Utulei Sewage Treatment Plant

NPDES Permit No. AS 0020001

These pages contain information concerning the final National Pollutant Discharge Elimination System (NPDES) permit for the Utulei Sewage Treatment Plant (STP) discharge.

I. SUMMARY

The U. S. Environmental Protection Agency, Region 9 (hereinafter USEPA Region 9) has granted a variance from secondary treatment requirements, under Section 301(h) of the Clean Water Act (CWA), to the American Samoa Power Authority (hereinafter permittee) for the Utulei STP discharge of treated wastewater through the Utulei ocean outfall to Pago Pago Harbor, South Pacific Ocean. In accordance with the Regional Administrator's 301(h) final decision and the authorities vested in Section 402 of the CWA, USEPA Region 9 is issuing a final NPDES permit.

The Utulei ocean outfall discharges within territorial waters of the Territory of American Samoa. However, because the American Samoa Environmental Quality Commission has not been delegated primary regulatory responsibility for administering the NPDES permitting program, USEPA Region 9 has primary regulatory responsibility for the discharge. USEPA Region 9 is reissuing an NPDES permit incorporating both federal 301(h) requirements and Territory water quality requirements, as outlined in revisions to the American Samoa Water Quality Standards.

II. ADMINISTRATIVE PROCESS

The administrative processing of a Section 301(h) variance application consists of the following actions:

A. Filing of a timely and complete application;

B. Comparison of the application with criteria set forth in the statute and regulations, preparation of a Tentative Decision Document (TDD), and recommendation for

the Regional Administrator by USEPA Region 9 staff; and initial screening of the application by the Territory;

C. Announcement of the tentative decision by the Regional Administrator;

D. Public notice of a draft NPDES permit incorporating the tentative decision;

E. Public hearings (if needed) to address public interest;

F. Territory concurrence in the granting of a 301(h) variance (by letter); or denial by the Territory and/or the Regional Administrator.

G. Processing of appeals, in accordance with 40 CFR 124, Subpart E.

III. TENTATIVE DECISION

On March 26, 1991, the permittee submitted a renewal application for a variance from secondary treatment requirements pursuant to Section 301(h) of the CWA. This application was based on an altered discharge, as defined at 40 CFR 125.58(b). On January 8, 1996, the permittee submitted a revised application based on an improved discharge, as defined at 40 CFR 125.58(i), and the construction of a new extended outfall. The permittee proposed the following discharge limitations for biochemical oxygen demand and total suspended solids in it's 301(h) variance application:

<table>
<tr><td colspan="5">Discharge Limitations</td></tr>
<tr><td>Discharge Parameter</td><td>Average Monthly</td><td>Average Weekly</td><td>Maximum Daily</td><td>Units</td></tr>
<tr><td rowspan="2">Biochemical Oxygen Demand (5-day)</td><td>78.3
1,085</td><td>--</td><td>--</td><td>mg/l
lbs/day</td></tr>
<tr><td colspan="4">The arithmetic mean of the BOD_5 values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.</td></tr>
<tr><td rowspan="2">Total Suspended Solids</td><td>112
1,552</td><td>--</td><td>--</td><td>mg/l
lbs/day</td></tr>
<tr><td colspan="4">The arithmetic mean of the TSS values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.</td></tr>
</table>

USEPA Region 9 notes that the permittee's proposed discharge limitation for biochemical oxygen demand (in lbs/day) is based on the previous 301(h)-modified permit issued September 26, 1985 and a treatment capacity of 1.3 million gallons per day (MGD).

During review of the 301(h) variance application, it was USEPA Region 9's best engineering judgement that the magnitude of the discharge limitation for total suspended solids (in mg/l), as proposed by the permittee, may result in poor treatment plant operations and would be inconsistent with the average monthly influent percent removal efficiency limitation for total suspended solids required by 40 CFR 125.57(a)(9). Consequently, USEPA Region 9 proposed the following alternative discharge limitations for total suspended solids in the TDD and draft permit:

Discharge Limitations for Total Suspended Solids				
Discharge Parameter	Average Monthly	Average Weekly	Maximum Daily	Units
Permittee	112 1,552	168 2,328	224 3,104	mg/l lbs/day
	The arithmetic mean of the TSS values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.			
USEPA Region 9	75 1,377	113 2,065	150 2,754	mg/l lbs/day
	The arithmetic mean of the TSS values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.			

USEPA Region 9 did not receive comments on the proposed discharge limitations for total suspended solids contained in the draft permit. Therefore, the final permit establishes the following 301(h) requirements for total suspended solids:

Discharge Limitations				
Discharge Parameter	Average Monthly	Average Weekly	Maximum Daily	Units
Total Suspended Solids	75 1,377	113 2,065	150 2,754	mg/l lbs/day
	The arithmetic mean of the TSS values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.			

These discharge limitations (in mg/l) are based on the permittee's previous 301(h)-modified permit issued September 26, 1985. Discharge limitations (in lbs/day) are calculated using a projected end-of-permit annual average flow of 2.2 MGD.

USEPA Region 9 used the following federal 301(h) decision criteria to evaluate the permittee's variance request. These nine criteria require that:

1. The discharge maintains a balanced indigenous population of fish, shellfish and wildlife, and allows recreational activities;

2. A practicable program to monitor potential impacts of the ocean discharge be implemented;

3. The discharge does not result in additional requirements on any other pollution source;

4. The discharge meets Territory water quality standards;

5. All applicable pretreatment requirements be enforced;

6. An urban area pretreatment program be implemented or secondary equivalency of toxics removal be demonstrated;

7. A program to reduce toxics from non-industrial sources be implemented;

8. The total pollutants discharged will not exceed NPDES permit limitations; and

9. The discharge will at minimum meet primary treatment standards and meet water quality criteria after initial mixing.

USEPA Region 9 drafted a tentative decision document (TDD) evaluating the proposed discharge. The Regional Administrator's tentative decision to grant a variance for biochemical oxygen demand and total suspended solids was issued on April 16, 2001, in coordination with the publicly noticed draft permit.

The TDD is incorporated, herein, by reference, as part of this fact sheet. This fact sheet, the fact sheet for the draft permit, and the TDD set forth the principal facts and significant legal, methodological, and policy questions considered in the development of the final permit. The final permit is based on the Administrative Record.

IV. FACILITY DESCRIPTION

The permittee presently operates the Utulei STP, located off Tulutulu Point, American Samoa, on the island of Tutuila. Utulei STP serves an estimated population of 8,000 people and receives mainly domestic wastewaters from the service area. In 1985, Utulei STP was permitted to discharge based on a treatment capacity of 1.3 MGD. In 1996, the permittee renovated and expanded the Utulei STP to a design treatment capacity of 2.2 MGD; end-of-permit effluent flows are not expected to exceed 2.2 MGD (annual average).

Utulei STP is currently designed to treat 2.2 MGD of primary treated wastewater, using the physical processes listed below:

Utulei STP	
Primary Treatment	Solids Handling
Influent bar screens Comminutor Clarigestor Chlorine contact chamber (no chlorination)	Influent bar screenings (to landfill) Clarigestor sludge (to drying beds at Tafuna STP) Air-dried sludge to municipal solid waste landfill, or land applied onsite as a soil conditioner

Based on data provided by the permittee, the treated wastewater discharge has the following characteristics for biochemical oxygen demand and total suspended solids:

Discharge Parameter	Units	Annual Average (1999)
Flow	MGD	1.29
Biochemical Oxygen Demand	mg/l	34
	% removal	50
Total Suspended Solids	mg/l	79
	% removal	77

Treated wastewater is discharged into middle Pago Pago Harbor, approximately 954 feet offshore of Tulutulu Point through a multi-port diffuser, at a depth of about 150 feet. The discharge point is described as follows:

Discharge Serial Number	South Latitude	West Longitude	Description
001	14° 17' 9.75"	170° 40' 22.25"	Primary discharge point to middle Pago Pago Harbor, South Pacific Ocean, terminating in a multi-port diffuser, approximately 954 ft offshore of Tulutulu Point, at a depth of about 150 ft.

Digested sludge is hauled to covered drying beds at the Tafuna Sewage Treatment Plant (STP) where it is dried and disposed of in a municipal solid waste landfill, or land applied onsite as a soil conditioner.

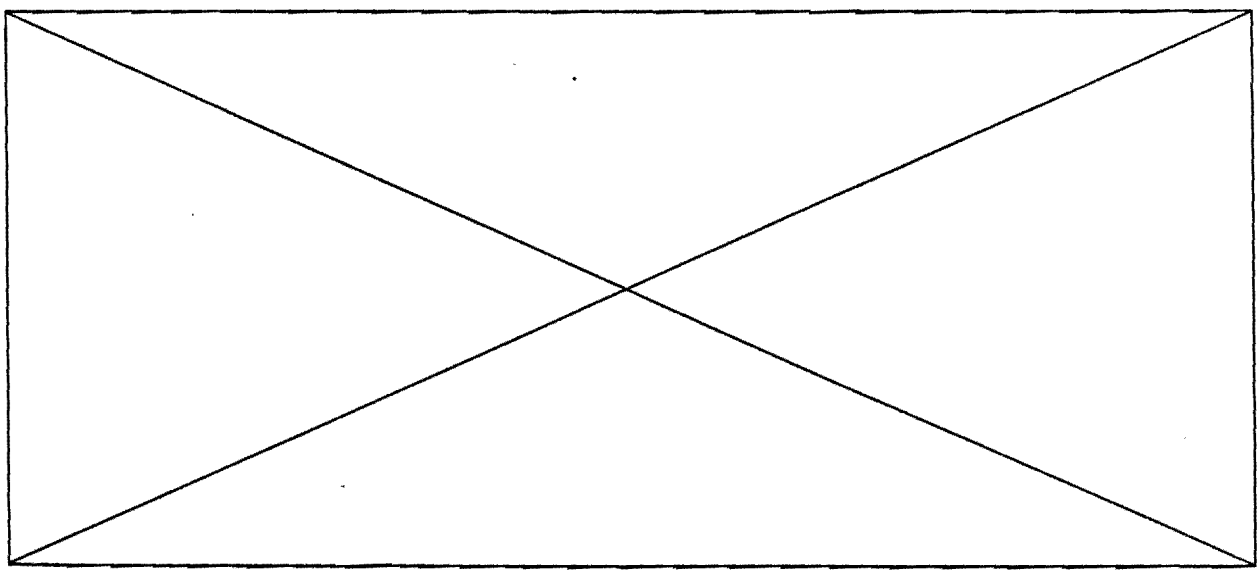
The discharge is regulated under NPDES Permit No. AS 0020001, issued September 26, 1985. This permit expired November 2, 1990.

V. BASES FOR REQUIREMENTS

Section 301(h) of the CWA gives the USEPA the authority to grant a variance from federal secondary treatment effluent standards contained in Section 301(b)(1)(B) of the CWA. Implementing regulations for section 301(h) and section 301(b)(1)(B) are found at 40 CFR 125, Subpart G and 40 CFR 133.102(c), respectively.

The *American Samoa Water Quality Standards* (ASWQS), dated April 11, 1990, contain water quality standards (use classifications and criteria) for waters of the Territory. These standards were revised and adopted in 1998, in accordance with CWA requirements. The final permit contains effluent limitations for pH and chronic whole effluent toxicity monitoring requirements that are based on and necessary to assure no violation of applicable water quality standards.

On February 19, 1993, the USEPA issued a final rule for the use and disposal of sewage sludge (40 CFR 503). This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The Territory has not been delegated the authority to implement this program, therefore, USEPA Region 9 is the implementing agency. The final NPDES permit contains biosolids/sludge management requirements consistent with 40 CFR 257, 258, and 503.



VI. DISCHARGE LIMITATIONS

301(h) Discharge Limitations

The final permit contains the following 301(h) discharge limitations for biochemical oxygen demand and total suspended solids:

Discharge Limitations				
Discharge Parameter	Average Monthly	Average Weekly	Maximum Daily	Units
Biochemical Oxygen Demand (5-day)	78.3 1,085	117 1,682	157 2,170	mg/l lbs/day
	The arithmetic mean of the BOD_5 values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.			
Total Suspended Solids	75 1,377	113 2,065	150 2,754	mg/l lbs/day
	The arithmetic mean of the TSS values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.			

The monthly average discharge limitation for biochemical oxygen demand (in mg/l) is based on the permittee's 1991 301(h) variance application. The monthly average discharge limitation for biochemical oxygen demand (in lbs/day) is also based on the permittee's 1991 301(h) variance application; this value is the monthly average discharge limitation in the permittee's previous 301(h)-modified permit issued September 26, 1985 and was calculated using a treatment capacity of 1.3 MGD. The monthly average discharge limitation for total suspended solids (in mg/l) is based on the permittee's previous 301(h)-modified permit issued September 26, 1985. The monthly average discharge limitation for total suspended solids (in lbs/day) is calculated using a projected end-of-permit annual average flow of 2.2 MGD.

For biochemical oxygen demand and total suspended solids, maximum daily discharge limitations (in mg/l) are 2.0 times the average monthly discharge limitations (in mg/l), and average weekly limitations (in mg/l) are 1.5 times the average monthly discharge limitations (in mg/l). Mass emission limitations (in lbs/day) are determined using the following equation: lbs/day = 8.34 x Ce x Q. "Ce" is the discharge limitation in mg/l and "Q" is the flow rate in MGD. For biochemical oxygen demand and total suspended solids, average monthly influent percent removal efficiency limitations are based on 40 CFR 125.57(a)(9).

Although the permittee did not request a variance from the technology based federal secondary treatment requirement for an effluent pH of not less than 6.0 nor greater than 9.0 pH units at all times [see 40 CFR 133.102(c)], because this technology based standard is less stringent than the corresponding ASWQS for pH (i.e., not less than 6.5 nor greater than 8.6), the ASWQS becomes the basis for controlling the pH of the discharge.

Water Quality Based Effluent Limitations

In accordance with 40 CFR 122.44(d), the need for discharge limitations based on water quality criteria in the ASWQS must be evaluated. As part of this evaluation, projected receiving water values--based on the reported maximum discharge value (expressed in units of concentration) and the minimum probable initial dilution (Dm; expressed as parts seawater per part wastewater)–were compared to the appropriate water quality criterion to determine the potential for an exceedance of that criterion and the need for a discharge limitation. Projected receiving water values were calculated using the following steady state equation: Cr = Ce ÷ Dm, where "Ce" is the reported maximum discharge value (generally in ug/l) and "Cr" is the projected receiving water value at the completion of initial dilution.

In June 1990, as part of a larger one-time screening effort, USEPA Region 9 conducted a priority pollutant scan of the Utulei STP effluent. USEPA Region 9 examined these chemical discharge data and--after considering a Dm of 202:1--concluded that projected receiving water values for these chemicals did not exceed applicable water quality criteria in the ASWQS. Therefore, discharge limitations for toxics criteria in 40 CFR 131.36(b) are not included in the permit.

Because these chemical discharge data are nearly ten years old and analytical methods have since improved, USEPA Region 9 did not evaluate reasonable potential using the statistical procedures outlined in the revised *Technical Support Document for Water Quality-based Toxics Control* (TSD; EPA/505/2-90-001, 1991). Rather, the final permit proposes up-to-date analytical methods, method detection limits, and quantification levels for effluent priority pollutant analyses. Should the results of these analyses indicate that reasonable potential for the discharge to exceed ASWQS does in fact exist, USEPA Region 9 has the authority to reopen and modify this permit (based on new information) and to impose water quality based effluent limitations on the Utulei STP discharge.

Zone of Initial Dilution

In accordance with the TDD and with the concurrence of the American Samoa Environmental Quality Commission, the final permit incorporates a Zone of Initial Dilution for the following water quality parameters: turbidity, total phosphorous, total nitrogen, chlorophyll a, light penetration depth, dissolved oxygen content, pH, and enterococci density. Compliance monitoring for these parameters is conducted at the boundary of this zone.

VII. MONITORING AND REPORTING PROGRAM

Pursuant to 40 CFR 125.63, a satisfactory revision to the receiving water monitoring and reporting program is established in the permit. The monitoring program requires influent and effluent monitoring for conventional, non-conventional, and toxic pollutants, including whole effluent toxicity. The permittee's Nonindustrial Source Control Program, designed to minimize the entrance of nonindustrial toxic pollutants into Utulei STP, is consistent with applicable 301(h) decision criteria. Sludge/biosolids monitoring, record keeping, and reporting requirements are consistent with applicable requirements.

Under the previous permit, receiving water monitoring focused on physical, chemical, and biological patterns around the Utulei ocean outfall. The permit includes a special receiving water monitoring condition which would allow--without further public notice--minor changes to the receiving water monitoring program. Such changes would: (1) result in a reallocation of the permittee's monitoring efforts to effectively address physical, chemical, and biological processes not well addressed by current monitoring efforts; and (2) provide a framework for interpreting discharge-related effects, relative to the effects of other sources of contaminants, in Pago Pago Harbor.

VIII. INFORMATION AND COPYING

Persons wishing further information may write to the following address or call Cindy Lin of USEPA Region 9 at (415)744-1965: U. S. Environmental Protection Agency; Region 9/WTR-2; 75 Hawthorne Street; San Francisco, CA 94105-3901. Copies of materials in the Administrative Record (other than those which USEPA Region 9 maintains as confidential) are available at the USEPA Region 9 office for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday (excluding holidays).

utuleistp.100401factsheet.wpd

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 *et seq.*, the "Act"),

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

is authorized to discharge treated wastewater from the Utulei Sewage Treatment Plant outfall (Discharge Serial No. 001), located off Tulutulu Point, Territory of American Samoa,

Latitude: 14° 17' 9.75" S
Longitude: 170° 40' 22.25" W

to receiving waters named Pago Pago Harbor, South Pacific Ocean, in accordance with effluent limitations, monitoring requirements, and other conditions set forth herein, and in the attached USEPA Region 9 *Standard Federal NPDES Permit Conditions*, dated May 10, 1990.

This permit shall become effective on October 9, 2001.

This permit and the authorization to discharge shall expire at midnight October 9, 2006.

Signed this 5th day of October, 2001.

For the Regional Administrator

Alexis Strauss

Alexis Strauss, Director
Water Division

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS, ZONE OF INITIAL DILUTION LIMITATIONS AND ZONE OF MIXING LIMITATIONS

1. Effluent limitations and monitoring requirements are based upon a project end-of-permit annual average flow of 0.096 m^3/sec (2.2 MGD). The permittee is authorized to discharge from Discharge Serial No. 001:

   a. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Maximum Discharge Limitations Unless Otherwise Noted						Monitoring Requirements	
	Average Monthly (lbs/day)	Average Weekly (lbs/day)	Maximum Daily (lbs/day)	Average Monthly (mg/L)	Average Weekly (mg/L)	Maximum Daily (mg/L)	Monitoring Frequency	Sample Type
Flow (m^3/day)	n/a [1]	n/a	n/a	[2]	[2]	[2]	Continuous	Continuous
Biochemical Oxygen Demand (5-day) [3]	1,085	1,628	2,170	78.3	117	157	Once/week	8 hr Composite
	Both the influent and the effluent shall be monitored. The arithmetic mean of the BOD_5 values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.							

[1] n/a = not applicable.

[2] Monitoring and reporting required. No limitation set at this time.

[3] Concentration and mass emission rate limitations for BOD_5 are based on the permittee's previous 301(h)-modified NPDES permit issued September 26, 1985. Mass emission rate limitations were calculated using a treatment capacity of 0.057 m^3/sec (1.3 MGD). These limitations were requested by the permittee in its revised 301(h) application dated January 8, 1996.

Effluent Characteristic	Maximum Discharge Limitations Unless Otherwise Noted						Monitoring Requirements	
	Average Monthly (lbs/day)	Average Weekly (lbs/day)	Maximum Daily (lbs/day)	Average Monthly (mg/L)	Average Weekly (mg/L)	Maximum Daily (mg/L)	Monitoring Frequency	Sample Type
Total Suspended Solids [4]	1,377	2,065	2,754	75	113	150	Once/week	8 hr Composite
	Both the influent and the effluent shall be monitored. The arithmetic mean of the TSS values, by concentration, for effluent samples collected over 30 consecutive calendar days shall not exceed 70% of the arithmetic mean, by concentration, for influent samples collected at approximately the same times during the same period.							
Settleable Solids	n/a			1 ml/L	n/a	2 ml/L	Once/day	Discrete
pH	Not less than 6.5 nor greater than 8.6.						Once/week	Discrete
Oil and grease	n/a			[2]	n/a	[2]	Quarterly (Nov/Feb/ May/Aug)	Discrete
Whole Effluent Toxicity (TUc) [5]	n/a			[2]	n/a	[2]	Quarterly (Nov/Feb/ May/Aug)	24 hr Composite

[4] Concentration limitations for TSS are based on the permittee's previous 301(h)-modified NPDES permit issued September 26, 1985. Mass emission rate limitations are calculated using a projected end-of-permit annual average flow of 0.096 m^3/sec (2.2 MGD).

[5] See Part A.4 of this permit for explanation of requirements.

Effluent Characteristic	Maximum Discharge Limitations Unless Otherwise Noted						Monitoring Requirements	
	Average Monthly (lbs/day)	Average Weekly (lbs/day)	Maximum Daily (lbs/day)	Average Monthly (mg/L)	Average Weekly (mg/L)	Maximum Daily (mg/L)	Monitoring Frequency	Sample Type
Priority Toxic Pollutants (excluding asbestos) and 301(h) Pesticides (ug/L) [6]	[2]	n/a	[2]	[2]	n/a	[2]	Nov 1999/ Nov 2002	[6]

[6] Priority toxic pollutants (excluding asbestos) and 301(h) pesticides are listed in 40 CFR 131.36(b)(1) and 40 CFR 125.58(p), respectively. The permittee shall collect *24 hour composite samples* for metals, 2,3,7,8-TCDD (dioxin), pesticides, base-neutral extractables, and acid-extractables. The permittee shall collect *discrete samples* for cyanide and volatile organics.

2. The discharge shall be substantially free from:

   a. Materials attributable to sewage that will produce objectionable color, odor, or taste, either of itself or in combinations, or in the biota.

   b. Visible floating materials, grease, oil, scum, foam, and other floating material attributable to sewage.

   c. Materials attributable to sewage that will produce visible turbidity or settle to form objectionable deposits.

   d. Substances and conditions or combinations thereof attributable to sewage which may be toxic to humans, other animals, plants, and aquatic life or produce undesirable aquatic life.

3. The discharge shall not cause:

   a. The temperature in the receiving water to deviate more than 1.5° Fahrenheit from conditions which would occur naturally, to fluctuate more than 1° Fahrenheit on an hourly basis, or to exceed 85° Fahrenheit due to the influence of other than natural causes.

   b. Changes in basin geometry or freshwater inflow that will alter current patterns in such a way as to adversely affect existing biological populations or sediment distribution in the receiving water.

   c. The average turbidity in the receiving water at and beyond the Zone of Initial Dilution to exceed 0.75 NTU.

   d. The average total phosphorous in the receiving water at and beyond the Zone of Initial Dilution to exceed 30 ug/L.

   e. The average total nitrogen in the receiving water at and beyond the Zone of Initial Dilution to exceed 200 ug/L.

   f. The average chlorophyll a in the receiving water at and beyond the Zone of Initial Dilution to exceed 1.0 ug/L.

   g. The light penetration depth in the receiving water at and beyond the Zone of Initial Dilution to not exceed 65 ft 50 percent of the time.

   h. A dissolved oxygen content in the receiving water at and beyond the Zone of Initial Dilution less than 70% saturation, or less than 5.0 mg/L.

i. The pH in the receiving water at and beyond the Zone of Initial Dilution to range less than 6.5 nor greater than 8.6, and to deviate more than 0.2 pH units from that which occurs naturally.

j. Enterococci density (concentration) in the receiving water at and beyond the Zone of Initial Dilution to exceed a geometric mean of 35 CFU/100 mL steady state geometric mean, nor any single sample to exceed 104 CFU/100 mL.

4. Whole Effluent Toxicity Monitoring Requirements

The USEPA Region 9 Laboratory will conduct only the quarterly or annual chronic toxicity test for the permittee. Any additional toxicity tests (see Parts A.4.e and A.4.f of this permit) shall be conducted by the permittee. The permittee is responsible for reporting toxicity test results to USEPA Region 9.

The permittee shall conduct quarterly toxicity tests on composite effluent samples. Samples shall be collected and shipped [7] in accordance with the Standard Operating Procedure (see Attachment 3) and the Memorandum of Agreement (effective 7/25/97) agreed upon by the permittee and USEPA Region 9. If, after two years of toxicity testing, measured toxicity is less than or equal to the chronic toxicity target values specified in Part A.4.b of this permit, then the monitoring frequency shall be reduced to annually (November).

a. Test Species and Methods

The permittee shall conduct toxicity tests with the sea urchin, *Strongylocentrotus purpuratus*, or sand dollar, *Dendraster excentricus* (fertilization test method 1008.0). The chronic toxicity of the effluent shall be estimated as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, EPA/600/R-95/136, August 1995 (or most recent edition).

b. Definition of Toxicity

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[7] The permittee should coordinate with Tafuna Sewage Treatment Plant (NPDES Permit No. AS0020010) so that effluent samples from both treatment plants can be collected and shipped at the same time to the USEPA Region 9 Laboratory (the Laboratory) where tests will be performed. In order to coordinate testing procedure, notice of the sampling schedule should be submitted to the Laboratory at least 30 days prior to shipment of each sample. The permittee shall attempt to ensure a total holding time from collection of the last portion of the composite sample until arrival at the Laboratory of not more than 36 hours. Should longer than a 36-hour holding time be anticipated, the permittee shall petition USEPA Region 9 (CMD-5) for an extension of the holding time (see Section 8.5.4, EPA/600/R-95/136). The extended holding time shall not exceed 72 hours.

Chronic toxicity measures a sublethal effect (*e.g.*, reduced growth, reproduction) to experimental test organisms exposed to an effluent compared to that of the control organisms. For this discharge, toxicity is defined by an exceedance of a chronic toxicity target value. These chronic toxicity target values are a Maximum Daily Value of 333 TUc, and an Average Monthly Value of 166 TUc.

c. Quality Assurance

(1) A series of five dilutions and a control shall be tested. The series shall include the two instream waste concentrations (IWCs) of 0.3% effluent and 0.6% effluent, one dilution below the IWC of 0.3% effluent, and two dilutions above the IWC of 0.6% effluent. The IWC is the percentage of effluent at the edge of the mixing zone over a specified averaging period.

(2) If organisms are not cultured in-house, concurrent testing with reference toxicants shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient.

(3) If either the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, then the permittee must re-sample and re-test within approximately 14 days.

(4) Reference toxicant tests shall be conducted using the same test conditions as effluent toxicity tests (*i.e.*, same test duration, *etc.*).

(5) Control and dilution water should be lab water, as described in the test methods manual. If the dilution water used is different from the culture water, a second control using culture water shall also be tested.

(6) When effluent monitoring frequencies for whole effluent toxicity and priority pollutants are concurrent, then chemical analyses for priority pollutants shall be performed on a split of the sample collected for whole effluent toxicity testing.

d. Preparation of Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan

The permittee shall submit to USEPA Region 9 an initial investigation toxicity reduction evaluation (TRE) workplan [approximately 1-2 pages] within 90 days of the effective date of this permit. This workplan shall describe steps which the permittee intends to follow in the event that toxicity (as defined) is detected, and should include at minimum:

(1) A description of the investigation and evaluation techniques that would be

used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;

(2) A description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility;

(3) If a toxicity identification evaluation (TIE) is necessary, who (*e.g.*, contract laboratory, *etc.*) will conduct the TIE.

e. Additional (Accelerated) Toxicity Testing

(1) If toxicity (as defined) is detected, then the permittee shall conduct three additional tests, one approximately every 14 days, over a 12-week period. Effluent sampling for the first test of the three additional tests shall commence within approximately 24 hours of receipt of the test results exceeding a chronic toxicity target value;

(2) However, *if implementation of the initial investigation TRE workplan indicates the source of toxicity* (*e.g.*, a temporary plant upset, *etc.*), then the permittee shall conduct only the first test of the three additional tests required above. If toxicity (as defined) is not detected in this first test, the permittee may return to the normal sampling frequency required in Part A.1.a of this permit. If toxicity (as defined) is detected in this first test, then Part A.4.f of this permit shall apply.

(3) If toxicity (as defined) is not detected in any of the three additional tests required above, then the permittee may return to the normal sampling frequency required in Part A.1.a of this permit.

f. Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE)

(1) If toxicity (as defined) is detected in any of the three additional tests, then, based on an evaluation of the test results and additional available information, USEPA Region 9 may determine that the permittee shall initiate a TRE, in accordance with the permittee's initial investigation TRE workplan and *Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants* (EPA/600/2-88/062, 1989). Moreover, the permittee shall develop a detailed TRE workplan which includes:

(a) Further actions to investigate/identify the cause(s) of toxicity;

(b) Actions the permittee has taken/will take to mitigate the impact of the discharge, to correct the noncompliance, and to prevent the recurrence of toxicity;

(c) A schedule under which these actions will be implemented;

and shall submit this workplan to USEPA Region 9 for approval.

(2) As part of this TRE process, the permittee may initiate a TIE using the test methods manuals, EPA/600/R-96/054 (Phase I), EPA/600/R-92/080 (Phase II), and EPA/600/R-92/081 (Phase III), to identify the cause(s) of toxicity.

(3) If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required by Part A.4.e of this permit, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE.

g. Reporting

(1) The permittee shall submit a full report of toxicity test results, including any toxicity testing required by Parts A.4.e and A.4.f of this permit, with the DMR for the month in which the toxicity tests are conducted. A full report shall consist of: (1) toxicity test results; (2) dates of sample collection and initiation of each toxicity test; and (3) chronic toxicity target values. Toxicity test results shall be reported according to the test methods manual chapter on Report Preparation.

If the initial investigation TRE workplan is used to determine that additional (accelerated) toxicity testing is unnecessary, these results shall be submitted with the DMR for the month in which investigations conducted under the TRE workplan occurred.

(2) Within 14 days of receipt of test results exceeding a chronic toxicity target value, the permittee shall provide written notification to USEPA Region 9 of:

(a) Findings of the TRE or other investigation to identify the cause(s) of toxicity;

(b) Actions the permittee has taken/will take, to mitigate the impact of the discharge and to prevent the recurrence of toxicity;

(c) When corrective actions, including a TRE, have not been *completed*, a schedule under which corrective actions will be implemented; or

(d) The reason for not taking corrective action, if no action has been

taken.

h. Toxicity Reopener

This permit may be modified in accordance with the requirements set forth at 40 CFR 122 and 124, to include appropriate conditions or limitations to address demonstrated effluent toxicity based on newly available information, or to implement any USEPA Region 9-approved new Territory water quality standards applicable to effluent toxicity.

5. Samples taken in compliance with the effluent monitoring requirements specified above shall be taken at the following locations:

a. Influent samples shall be taken after the last addition to the collection system and prior to any in-plant return flows and the first treatment process, where representative samples of the influent can be obtained.

b. Effluent samples shall be taken after any in-plant return flows and the last treatment process and prior to mixing with the receiving waters, where representative samples of the effluent can be obtained.

B. DEFINITIONS

1. *Average monthly discharge limitation* means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

2. *Average weekly discharge limitation* means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.

3. *8 hour Composite sample* means a combination of eight equal individual portions taken at equal time intervals over any 8-hour period that reasonably represents the calendar day. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling.

4. *24 hour Composite sample* means a combination of eight individual portions taken at equal time intervals over any 24-hour period that reasonably represents the calendar day. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling.

Daily discharge means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

6. *Discrete sample* means any individual sample collected in less than 15 minutes. The sampling period shall coincide with the period of maximum discharge flow.

7. *Maximum daily discharge limitation* means the highest allowable "daily discharge."

C. PRETREATMENT REQUIREMENTS

Under 40 CFR 125.66(d), the permittee must implement a public education program designed to minimize the entrance of nonindustrial toxic pollutants into the Utulei Sewage Treatment Plant. In accordance with the Tentative Decision Document, the permittee shall continue to implement it's approved Nonindustrial Source Control Program. Copies of all nonindustrial source control educational materials from the period covering the previous calendar year shall be submitted with the semi-annual water column monitoring report due January 28th to USEPA Region 9 and ASEPA.

D. SLUDGE/BIOSOLIDS LIMITATIONS AND MONITORING REQUIREMENTS

1. All biosolids [8] generated by the permittee shall be reused or disposed of in compliance with applicable portions of:

   a. 40 CFR 503: For biosolids that are land applied, placed on a surface disposal site (dedicated land disposal site or monofill), or incinerated; 40 CFR 503, Subpart B (land application) applies to biosolids applied for the purpose of providing nutrients or conditioning the soil for crops or vegetation. 40 CFR 503 Subpart C (surface disposal) applies to biosolids placed on the land for the purpose of disposal;

   b. 40 CFR 258: For biosolids disposed in municipal solid waste landfills;

   c. 40 CFR 257: For all biosolids use and disposal practices not covered in 40 CFR 258 or 503.

2. The permittee is responsible for assuring that all biosolids produced at the sewage treatment plant are used or disposed of in accordance with 40 CFR 257, 258, and 503, whether the permittee reuses or disposes of the biosolids directly or transfers the biosolids to another entity for further treatment, reuse, or disposal. The permittee is responsible for informing subsequent preparers, appliers, and disposers of the requirements which these

[8] Biosolids means stabilized, non-hazardous sewage sludge.

entities must meet under 40 CFR 257, 258, and 503.

3. No biosolids shall be allowed to enter wetlands or other waters of the United States.

4. Biosolids treatment, storage, reuse, or disposal shall not contaminate groundwater.

5. Biosolids treatment, storage, reuse, or disposal shall be performed in a manner as to minimize nuisances such as objectionable odors or flies.

6. The permittee shall assure that haulers transporting biosolids for off-site treatment, reuse, or disposal take all necessary measures to keep the biosolids contained.

7. If biosolids are stored for over two years from the time it was generated, the permittee must ensure compliance with all requirements for surface disposal in 40 CFR 503 Subpart C, or must submit a written request for longer temporary storage, including information required in 40 CFR 503.20(b), to USEPA Region 9.

8. Sludge containing PCBs equal to or greater than 50 mg/kg of total solids (100% dry weight basis) shall be disposed of in accordance with 40 CFR 761.

9. Any biosolids treatment, storage, or disposal site shall have adequate facilities which divert surface runoff from adjacent areas, protect site boundaries from erosion, and prevent any conditions that would cause drainage to escape from the site. Adequate protection is defined as protection from at least a 100-year storm and from the highest tidal stage that may occur.

10. Monitoring shall be conducted as follows:

    a. Biosolids shall be tested during November of years 1999 and 2002 for all pollutants listed under section 307(a) of the Act. Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis.

    b. Biosolids shall be tested during November of years 1999 and 2002, or more frequently if necessary, to determine hazardousness using the Toxicity Characterization Leachate Procedure (see Method 1311 in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846). Contaminants and regulatory levels are found in Table 1 in 40 CFR 261.24(b).

    c. Biosolids which are land applied or placed in a surface disposal site shall be tested for metals as required in 40 CFR 503.16 and 40 CFR 503.26 using *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (see 40 CFR 503.8(b)(4)), and for organic-N, ammonium-N, and nitrate-N using *Standard Methods for the Examination of Water and Wastewater* (1989). The appropriate monitoring frequency for these tests shall be determined by the biosolids volume land applied or placed in a surface disposal site. Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis.

Biosolids Volume (dry metric tons/year)	Monitoring Frequency
0 - 290	Annually (Nov)
290 - 1500	Quarterly (Feb/May/Aug/Nov)
1500 - 15,000	Bi-Monthly (Feb/Apr/Jun/Aug/Oct/Dec)
> 15,000	Monthly

d. For biosolids which are land applied, the permittee shall demonstrate that biosolids meet Class A or Class B pathogen requirements by one of the methods listed in 40 CFR 503.32. The permittee shall track and keep records of the operational parameters used to achieve the vector attraction reduction requirements in 40 CFR 503.33(b).

e. Biosolids that are placed on a surface disposal site shall be monitored as follows:

(1) Biosolids shall be tested for metals as required in 40 CFR 503.26 using *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (see 40 CFR 503.8(b)(4)), at the appropriate frequency required by Part D.10.c of this permit. Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis.

(2) Prior to placement on a surface disposal site, the permittee shall demonstrate that biosolids meet Class B pathogen requirements, or shall ensure that the site is covered at the end of each operating day.

(3) The permittee shall track and keep records of the operational parameters used to achieve the vector attraction reduction requirements in 40 CFR 503.33(b).

(4) When biosolids are placed on a surface disposal site, a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.

f. Biosolids disposed of in a municipal solid waste landfill unit shall be tested semi-annually using the Paint Filter Test (Method 9095 in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*) to demonstrate compliance with 40

CFR 258.28 which prohibits disposal of materials with free liquids in a municipal solid waste landfill unit.

11. For biosolids which are land applied, the permittee, either directly or through contractual agreements with their biosolids management contractors, shall comply with the following 40 CFR 503 notification requirements:

a. A reuse/disposal plan shall be submitted to the USEPA Region 9 Biosolids Coordinator. The plan shall include: results of monitoring/analyses required for use or disposal at the new or previously unreported site(s); a description and topographic map of the proposed site(s) for use or disposal; names and addresses of the applier(s) and site owner(s); and a listing of any Territory or local permits which must be obtained. For land application sites, the plan shall be submitted by the land applier and shall include: a description of the crops or vegetation to be grown; proposed nitrogen loading rates and determination of agronomic rates; depth to groundwater; and a groundwater monitoring plan (if one exists).

b. For biosolids that are land applied, if the permittee's biosolids do not meet 40 CFR 503.13 Table 3 metals concentration limitations, then the permittee must require the land applier to notify USEPA Region 9 of any previous site applications of biosolids subject to cumulative loading limitations and the cumulative amounts of pollutants applied to date at the site, per 40 CFR 503.12(e) and (j).

c. For biosolids that are land applied, the permittee shall notify the applier in writing of the nitrogen content of the biosolids, and of all the applier(s) requirements in 40 CFR 503, including the requirement that the applier certify that management practices, site restrictions, and any applicable vector attraction reduction requirements in 40 CFR 503 Subpart B have been met. The permittee shall require the applier to certify at the end of 38 months following application of Class B biosolids that harvesting restrictions in effect have been met.

d. If bulk biosolids are shipped to another State/Tribal/Territory Lands, the permittee must send notice prior to the initial shipment of bulk biosolids to permitting authorities in the receiving State/Tribal/Territory Land (the USEPA Regional Office for that area and the State/Tribal/Territory authorities).

12. The permittee shall submit an annual biosolids report to the USEPA Region 9 Biosolids Coordinator by February 19th of each year for the period covering the previous calendar year. The report shall include:

a. The amount of biosolids generated that year, in dry metric tons, and the amount accumulated from previous years.

b. Results of all monitoring required by Part D.10 of this permit.

c. Descriptions of pathogen requirements, vector attraction reduction requirements, site and harvesting restrictions, management practices, and certifications, as required in 40 CFR 503.17 and 40 CFR 503.27.

d. Results of any required groundwater monitoring or certification by a groundwater scientist that the application/disposal will not contaminate an aquifer.

e. Names and addresses of land appliers, surface disposal site operators, and landfill operators; and volumes applied or disposed (dry metric tons).

f. Names, mailing addresses, and street addresses of entities who received biosolids for further treatment, storage, disposal in a municipal solid waste landfill, or for other use or disposal methods not covered above, and volumes delivered to each.

13. The permittee shall require any appliers contracted to manage their biosolids to submit an annual biosolids report to the USEPA Region 9 Biosolids Coordinator by February 19th of each year, for the period covering the previous calendar year. The report shall include: names and addresses of land appliers and surface disposal site operators, name, location (site addresses and latitude/longitude), and size (hectares) of site(s), volumes applied/disposed (dry metric tons) and for land application, biosolids loading rates (metric tons per hectare), nitrogen loading rates (kg/ha), dates of application, crops grown, dates of seeding and harvesting, and certifications that the requirements to obtain information in 40 CFR 503.12(e)(2), management practices in 40 CFR 503.14, and site restrictions in 40 CFR 503.32(b)(5) have been met.

14. The general requirements in 40 CFR 503.12 and the management practices in 40 CFR 503.14 do not apply when bulk biosolids are applied to land, if the biosolids meet the pollutant concentrations in 40 CFR 503.13(b)(3), the Class A pathogen requirements in 40 CFR 503.32(a), and one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (b)(8).

E. RECEIVING WATER MONITORING REQUIREMENTS AND CONDITIONS

1. The permittee shall conduct the following receiving water monitoring program (*i.e.*, water column, sediment, and benthic community monitoring) in Pago Pago Harbor.

a. Water Column and Sediment Monitoring Stations

The permittee shall verify all station locations (latitude and longitude) and depths during the first sampling survey and shall submit this information with the first semi-annual water column monitoring report to USEPA Region 9 and ASEPA for approval.

Station		Location
n/a	Diffuser midpoint	Latitude: 14° 17' 9.75"S Longitude: 170° 40' 22.25"W
A	Zone of Initial Dilution	51.8 m (170 ft) northwest of the diffuser midpoint; 51.8 m (170 ft) depth
B	Zone of Initial Dilution	51.8 m (170 ft) southeast of the diffuser midpoint; 42.7 m (140 ft) depth
A1	Zone of Mixing	168 m (550 ft) northwest of the diffuser midpoint, off reef flat edge; __ m (__ ft) depth
B1	Zone of Mixing	168 m (550 ft) southwest of the diffuser midpoint, off reef flat edge; __ m (__ ft) depth
C	Farfield	900 m (2,953 ft) northwest of the diffuser midpoint; 25.3 m (83 ft) depth
D	Farfield	900 m (2,953 ft) south-southeast of the diffuser midpoint; 36.6 m (120 ft) depth
OH4	Reference	Outer harbor between Tulutulu Point and Tafagamanu Point; Latitude: 14° 17' 377" S Longitude: 170° 39' 999" W 55 m (180 ft) depth

b. Water Column Monitoring

Receiving Water Characteristic	Units	Station	Monitoring Frequency	Sample Type/ Sampling Depths *
Turbidity	NTU	A, B, C, D, OH4	Semi-annually (May/Nov)	Nephelometer
Total Phosphorus	ug/L	A, B, C, D, OH4	"	Grab
Total Nitrogen	ug/L	A, B, C, D, OH4	"	"
Chlorophyll a	ug/L	A, B, C, D, OH4	"	"
Light Penetration	ft	A, B, C, D, OH4	"	Secchi disk
Dissolved Oxygen	mg/L	A, B, C, D, OH4	"	Grab
pH	pH units	A, B, C, D, OH4	"	"
Enterococci	CFU/100 mL	A1, B1, C, D, OH4	"	"

* For grab samples, the sampling depth profile at Stations A, B, A1, B1, C, D, and OH4 is 1 m below the surface, mid-depth, and 1 m above the bottom. Samples shall be collected and analyzed according to *Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods* (EPA 430/9-86-004).

(1) Water column monitoring data and an analysis of these data may be provided to the permittee by another entity, if a MOA has been agreed to by the permittee and this entity. A copy of the MOA must be submitted to USEPA Region 9 and ASEPA for approval before this alternative water column monitoring procedure is implemented by the permittee.

c. Sediment Monitoring

Sediment Characteristic	Units	Station	Monitoring Frequency	Sample Type *
Grain Size	phi (% volume)	A, C, OH4	Annually (Nov)	Grab
Total Organic Carbon	mg/kg (dry weight)	"	"	"

* Samples shall be collected, and the top 2 cm of each sample shall be analyzed according to *Quality Assurance and Quality Control (QA/QC) for 301(h) Monitoring Programs: Guidance on Field and Laboratory Methods* (EPA 430/9-86-004).

(1) Sediment monitoring data and an analysis of these data may be provided to the permittee by another entity, if a MOA has been agreed to by the permittee and this entity. A copy of the MOA must be submitted to USEPA Region 9 and ASEPA for approval before this alternative sediment monitoring procedure is implemented by the permittee.

d. Benthic Community Monitoring

(1) *In November,* during years two and four of this permit, the permittee shall conduct videotape monitoring of coral reefs. Stations for coral reef surveys are the following western middle and outer Pago Pago Harbor transect locations and depths surveyed in *Use Attainability Analysis and Site-Specific Criteria Analysis; Pago Pago Harbor* (CH2M HILL, 1991):

Transect Station	Location
MH-5	Middle Harbor, located on south face of reef at Goat Island Point; transects at 25, 40, and 60 ft
MH-7	Middle Harbor, located on east face of reef off Utulei; transects at 25, 40, and 60 ft
MH-8	Middle Harbor, located on east face of reef off Utulei tank farm; transects at 25,40, and 60 ft
MH-6	Middle Harbor, located on northeast face of reef off Tulutulu Point; transects at 25, 40, and 60 ft
OH-2	Outer Harbor, located on south face of reef south of Tulutulu Point; transects at 25, 40, and 60 ft
OH-4	Outer Harbor, located on north face of reef, north of Niuloa Point; transects at 25, 40, and 55 ft Latitude: 14° 17' 32.632" S Longitude: 170° 40' 36.233" W

(2) Benthic community monitoring data and an analysis and summary of these data may be provided to the permittee by another entity, if a MOA has been agreed to by the permittee and this entity. A copy of the MOA must be submitted to USEPA Region 9 and ASEPA for approval before this alternative benthic community monitoring procedure is implemented by the permittee.

2. The permittee shall submit semi-annual water column monitoring reports to USEPA Region 9 and ASEPA by January 28th and July 28th for the period covering the previous

six calendar months. The permittee shall submit annual sediment monitoring reports and benthic community monitoring reports for years two and four of this permit to USEPA Region 9 and ASEPA by February 19th of each year for the period covering the previous calendar year. These reports shall include:

a. A description of climatic and receiving water characteristics at the time of sampling (*e.g.*, weather observations, floating debris, discoloration, wind speed and direction, swell or wave action, time of sampling, tide height, *etc.*).

b. A description of sampling stations, including differences unique to each station (*e.g.*, station location, sediment grain size, distribution of bottom sediments, rocks, shell litter, calcareous worm tubes, *etc.*).

c. A description of the sample collection and preservation procedures used in the receiving water monitoring program.

d. A description of the specific method used for laboratory analysis.

e. An in-depth discussion of the results of the receiving water monitoring program with regard to compliance with the criteria for modifying the secondary treatment requirements under Section 301(h) of the Act. All tabulations and computations shall be explained.

Where water column, sediment, and benthic community monitoring data and/or data analyses are reported to USEPA Region 9 and ASEPA by another entity (see Parts E.1.b.1, E.1.c.1 and E.1.d.2 of this permit), the permittee's semi-annual report, annual report, and report for year two/four shall include a copy of the approved MOU and citation(s) under which information provided in accordance with the approved MOU is submitted to USEPA Region 9 and ASEPA.

3. This permit may be modified by USEPA Region 9 to enable the permittee to participate in regional monitoring activities conducted in Pago Pago Harbor during the term of this permit. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a cost-effective monitoring design and to best utilize the pooled scientific resources of the region. During these coordinated monitoring efforts, the permittee's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of wastewater discharges to Pago Pago Harbor. Anticipated modifications to the monitoring program will be coordinated so as to provide a comprehensive picture of the ecological and statistical significance of monitoring results and to determine cumulative impacts of various pollutant sources. If predictable relationships among the biological, water quality and effluent monitoring variables can be demonstrated, it may be appropriate to decrease the permittee's monitoring effort. Conversely, the monitoring program may be intensified if it appears that the objectives cannot be achieved through the permittee's existing monitoring program. These changes will improve the overall effectiveness of monitoring in Pago Pago Harbor. Minor

changes may be made without further public notice.

F. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. All wastewater monitoring, and sludge/biosolids monitoring, receiving water monitoring, sample preservation, and analyses shall be performed as described in the most recent edition of 40 CFR 136, Appendix B, unless otherwise specified in this permit. For priority toxic pollutant and 301(h) pesticide effluent analyses, the permittee shall utilize an approved test procedure with a Method Detection Limit [9] (MDL) that is lower than the saltwater and/or human health (for consumption of organisms only) criteria concentrations listed in 40 CFR 131.36(b)(1). If the MDL is higher than the criteria concentrations, then the permittee shall utilize the approved test procedure with the lowest MDL. In accordance with 40 CFR 122.45(c), effluent analyses for metals shall measure "total recoverable metal", except for chromium (VI) which shall be measured as "dissolved metal."

2. The permittee shall have and implement an acceptable written quality assurance project plan for laboratory analyses. All QA/QC samples must be analyzed on the same dates that wastewater samples are analyzed. Duplicate chemical analyses must be conducted on a minimum of ten percent of the samples, or at least one sample per month, whichever is greater. A similar frequency shall be maintained for analyzing spiked samples. When requested by USEPA Region 9, the permittee shall participate in the NPDES discharge monitoring report QA performance study. The permittee must have a success rate ≥80%.

3. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of this permit.

4. The permittee shall submit influent and effluent monitoring results on monthly Discharge Monitoring Report (DMR) forms (EPA No. 3320-1) and in an electronic format to USEPA Region 9 and ASEPA by the 28th of March, June, September, and December for each period covering the previous three calendar months (*e.g.*, December, January and February monthly DMRs are due by March 28th). Unless otherwise specified, effluent flow shall be reported in terms of the arithmetic mean flow over each monthly period, and the maximum daily flow over that monthly period.

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[9] The Method Detection Limit (MDL) is the minimum concentration of an analyte that can be detected with 99% confidence, as defined by a specific laboratory method in 40 CFR 136, Appendix B.

5. For the purposes of reporting, the permittee shall use the reporting threshold equivalent t the laboratory's method detection limit [9] (MDL). As such, the permittee must utilize a standard calibration where the lowest standard point is equal to or less than the concentration of the minimum level [10] (ML). Analytical results at or above the laboratory's MDL shall be reported on the DMR as the measured concentration. For analytical results between the MDL and the ML, the permittee shall report in the comment section on the DMR the standard deviation (S) value (determined by the laboratory during the MDL study) and the number of sample aliquots (n). Analytical results below the laboratory's MDL shall be reported as zero (*i.e.*, "0").

6. Duplicate signed copies of all reports required herein shall be submitted to the Regional Administrator and ASEPA at the following addresses:

USEPA Region 9
Pacific Insular Area Program (CMD-5)
75 Hawthorne Street
San Francisco, CA 94105-3901
Telephone: 415/744-1484

ASEPA
Office of the Governor
Pago Pago, American Samoa 96799
Telephone: 684/633-2305

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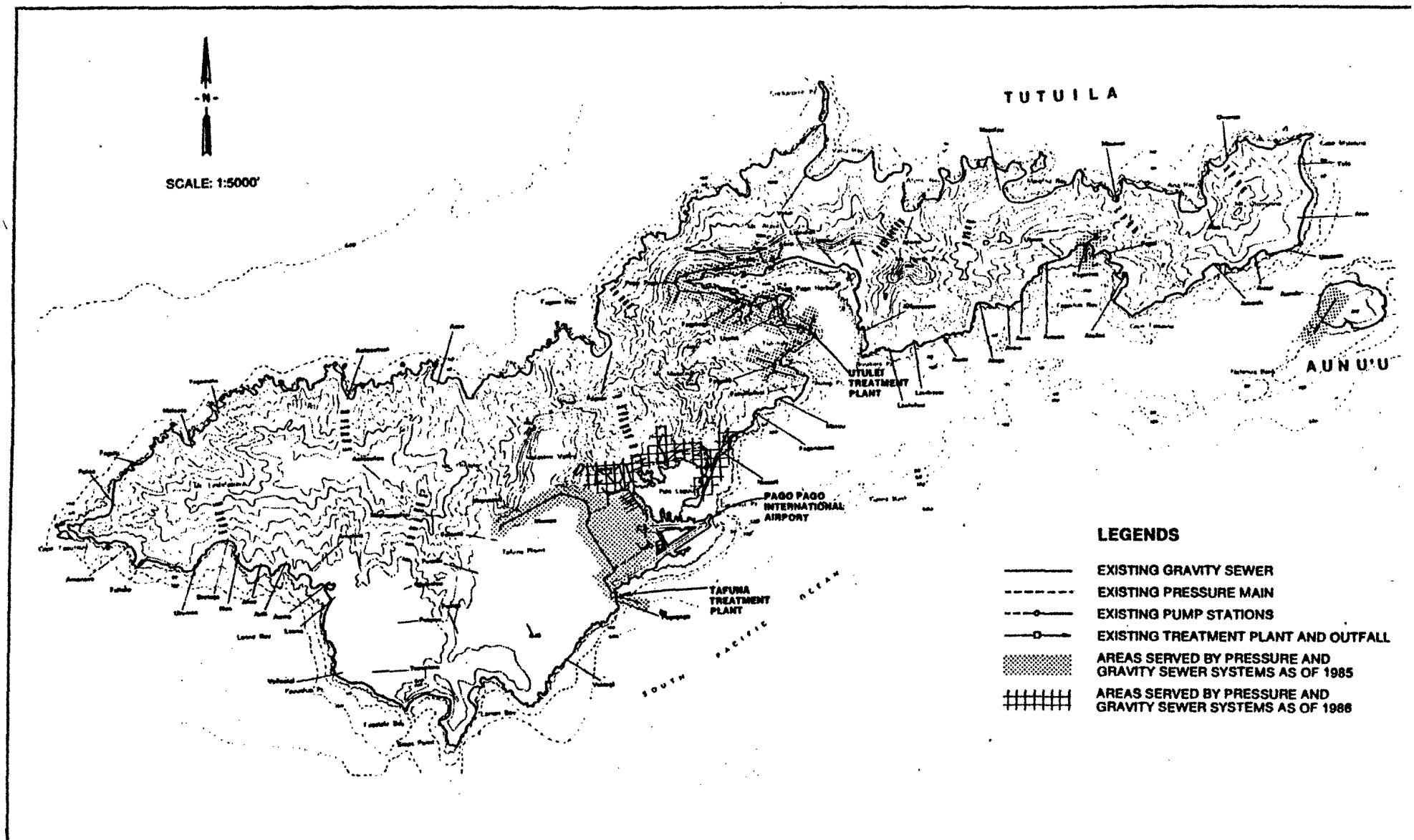
10 The Minimum Level (ML) is the concentration in a sample equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed. Where a promulgated ML is not available, an interim ML is calculated using a factor of 3.18 times the MDL.

Attachment 1:

LOCATION MAP


-N-
SCALE: 1:5000'
TUTUILA
AUNU'U
UTULEI TREATMENT PLANT
PAGO PAGO INTERNATIONAL AIRPORT
TAFUNA TREATMENT PLANT
SOUTH PACIFIC OCEAN
LEGENDS
EXISTING GRAVITY SEWER
EXISTING PRESSURE MAIN
EXISTING PUMP STATIONS
EXISTING TREATMENT PLANT AND OUTFALL
AREAS SERVED BY PRESSURE AND GRAVITY SEWER SYSTEMS AS OF 1985
AREAS SERVED BY PRESSURE AND GRAVITY SEWER SYSTEMS AS OF 1986

Attachment 2:

PROCESS DIAGRAMS

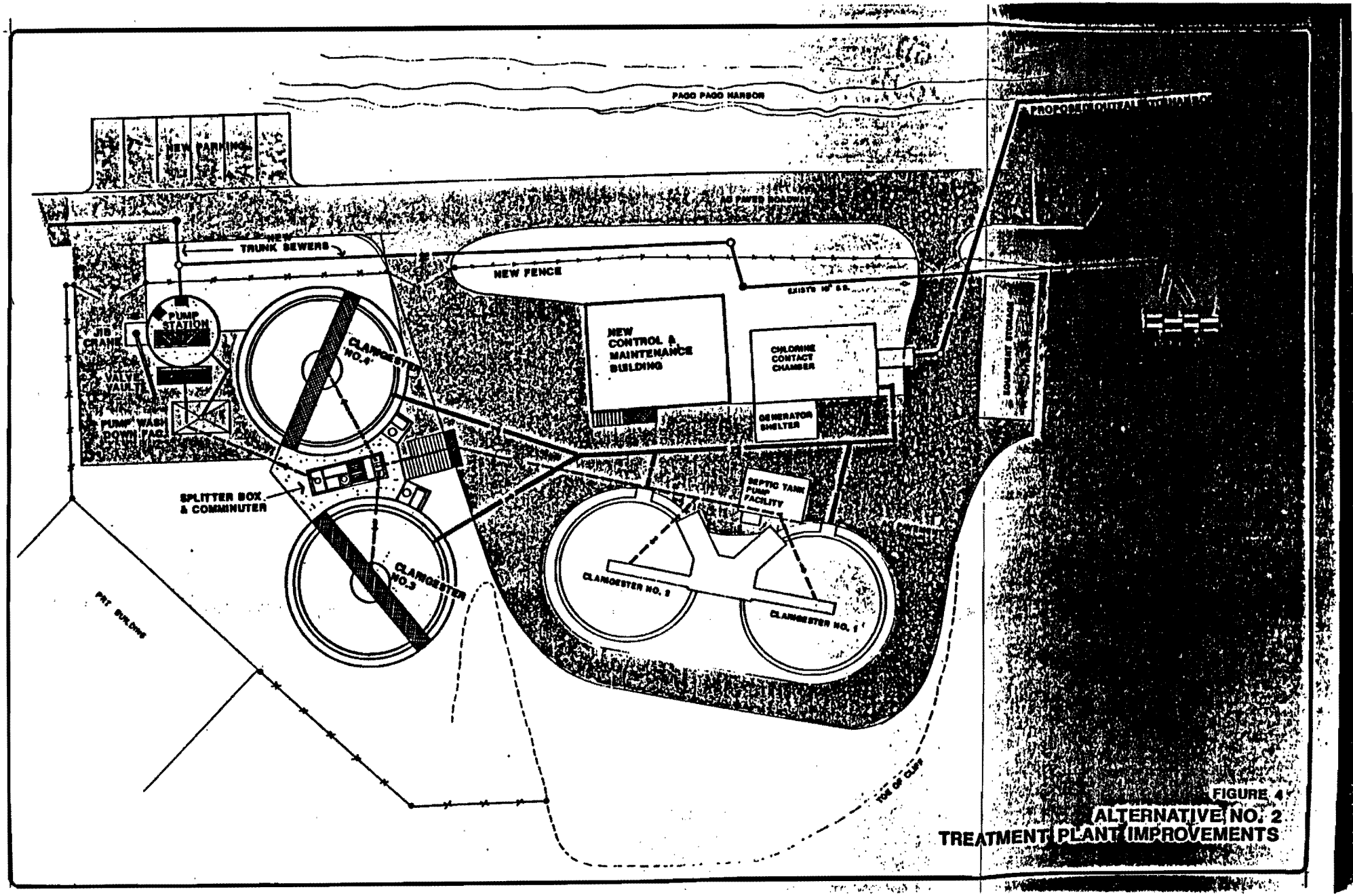
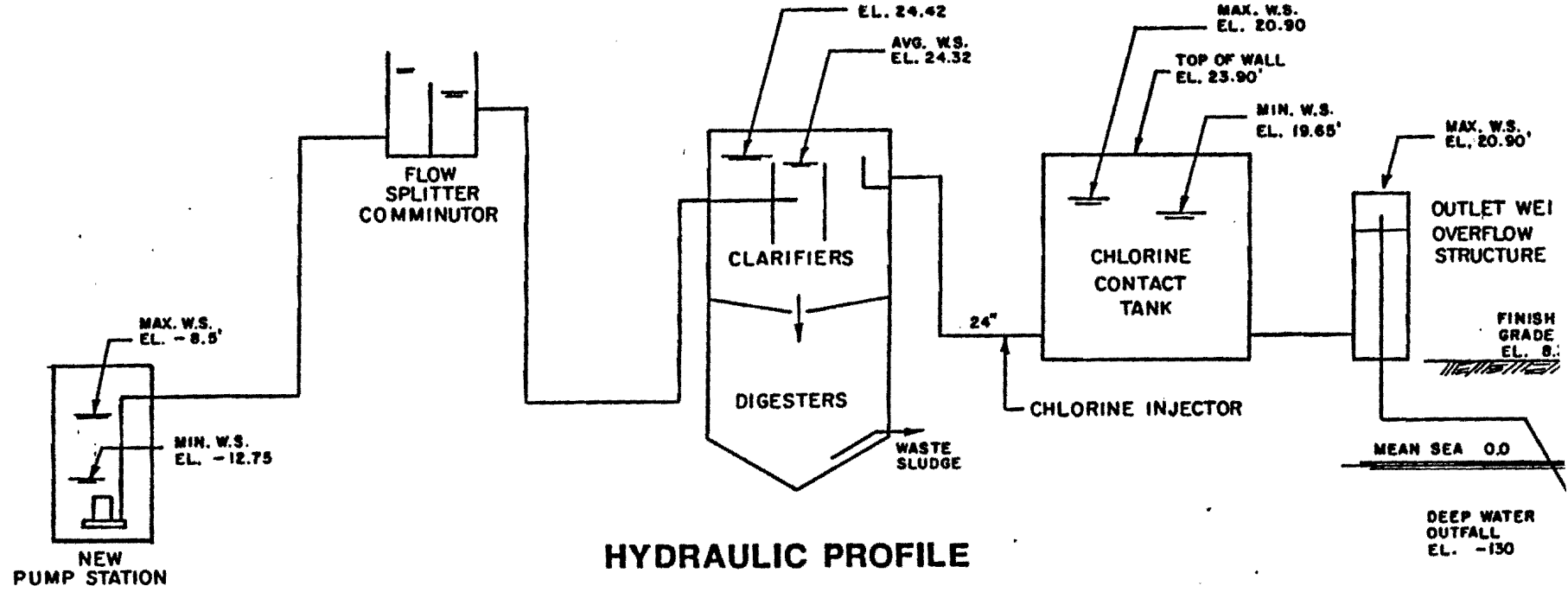


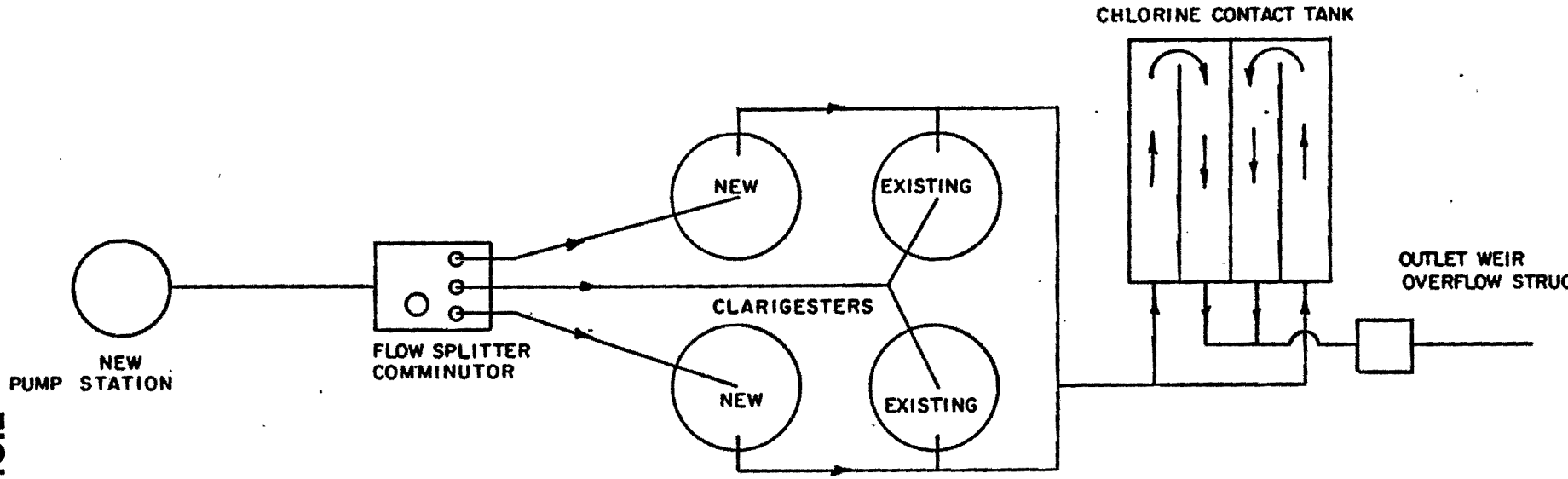
FIGURE 4

ALTERNATIVE NO. 2

TREATMENT PLANT IMPROVEMENTS



HYDRAULIC PROFILE



FLOW SCHEMATIC

FIGURE 6
RECOMMENDED TREATMENT
PLANT FLOW DIAGRAM

Attachment 3:

STANDARD OPERATING PROCEDURE FOR WHOLE EFFLUENT TOXICITY

MEMORANDUM OF AGREEMENT
between the
American Samoa Power Authority
and the
United States Environmental Protection Agency Region 9

I. Purpose and Intent

The purpose of this Memorandum of Agreement (MOA) is to establish the responsibilities of the American Samoa Power Authority (ASPA) and the United States Environmental Protection Agency Region 9 (USEPA), with regards to conducting the toxicity tests required under the new National Pollution Discharge Elimination System (NPDES) permits being issued to ASPA's wastewater treatment plants (WWTP) located at Tafuna and Utulei, on the island of Tutuila in American Samoa.

II. Background

In March 1992, ASPA requested renewal of its variances under section 301(h) of the Clean Water Act from the secondary treatment requirements of the Act, for the Utulei WWTP (NPDES Permit No. AS0020001) and the Tafuna WWTP (NPDES Permit No. AS0020010). The final decision by USEPA to grant the waivers and issue final permits for both facilities are expected by October 1997.

As part of the conditions upon which the waivers are being granted, the permits require that chronic toxicity tests be conducted on each plant's effluent as follows:

> "The permittee shall conduct quarterly toxicity tests on composite effluent samples. Samples shall be collected and shipped in accordance with the Standard Operating Procedure (see Attachment B) and the Memorandum of Understanding agreed upon by the permittee and USPEA Region 9. If, after two years of toxicity testing, measured toxicity is less than or equal to the chronic toxicity target values specified in Part A.4.b of this permit, then the monitoring frequency shall be reduced to annually."

Current USEPA policy, "Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Program," EPA Regions 9 and 10, May 31, 1996, requires monthly acute and chronic toxicity tests be conducted by all major NPDES permitees. Such tests provide a cost-effective, highly sensitive means to analyze the synergistic effects and bioavailability of toxicants in the effluent, by determining the effects of the effluent on receiving waters organisms' mortality, as well as growth and reproduction.

For the American Samoa WWTP, the agency reconsidered its policy and reduced the amount of toxicity testing required of the American Samoa WWTPs after taking into

consideration the following: 1) the lack of on-island technical expertise to conduct such tests; 2) the logistical problems in sending samples off-island within the required holding time; and, 3) the domestic nature of the effluent. In addition, knowing of ASPA's extremely limited operational budget, USEPA is agreeing to conduct the toxicity tests for both WWTPs as required by their permits, subject to the conditions agreed upon in this document.

III. Terms and Conditions

Whereas, ASPA, is the permittee for the Utulei and Tafuna WWTPs, and as such, is responsible for complying with all the requirements of these facilities' NPDES permits;

Whereas, the NPDES permits for both facilities require chronic toxicity tests to be conducted on a quarterly and later on an annual basis if no toxicity is found within the first two years of the permits;

Whereas, USEPA, has the resources and is willing to conduct the routine toxicity tests for ASPA.

Now therefore, the Parties agree as follows:

1. Each year, ASPA shall develop a sampling collection schedule indicating the week(s) when samples will be collected. The schedule for the first year shall be submitted to USEPA, within 30 days of the effective dates of the permits. ASPA shall notify USEPA of any changes to the schedule as soon as possible.

2. USEPA shall send a cooler to ASPA with sample bottles and collection equipment four weeks prior to the scheduled sampling week.

3. ASPA shall collect 24-hour flow-weighted effluent samples from each treatment plant on a frequency specified in the permits and as specified by the Standard Operating Procedures for such collection which is attached to this document as "Attachment 1." Both treatment plants' samples shall be collected and shipped to the USEPA Region 9 laboratory in the same shipment, via an express mailing company (e.g. DHL, Federal Express), so that the samples are received within the required holding time of 36 hours and not longer than 72 hours. ASPA shall contact Amy Wagner the day of shipment by telephone (510-412-2329) or fax (510-412-2304) with the number of coolers being shipped, time of shipment, name of courier service, and air bill number.

4. Upon receipt of the samples, USEPA Region 9 laboratory shall conduct chronic toxicity tests for each facility's effluent as specified in their permits. Results shall be faxed to ASPA Wastewater Branch at (684/644-5451) within two weeks of receipt of the effluent sample.

5. ASPA shall be responsible for reporting these results to USEPA as specified in the permit.

6. Should a toxicity effluent limitation be exceeded, ASPA shall be responsible for conducting the additional toxicity tests at an increased frequency, and if necessary, conducting a Toxicity Reduction Evaluation and Toxicity Identification Evaluation as specified in the permits.

IV. Termination of MOA

1. Either party may terminate this MOA by providing written notification to the other party.

2. This MOA may be terminated at any time by mutual written consent of the parties.

3. Unless otherwise terminated, this MOA will terminate upon at the end of permit terms.

V. Effective Date

This Agreement shall be effective upon signature by the parties.

For the United States Environmental Protection Agency Region 9:

Norman L. Lovelace
Regional Pacific Insular Area Manager

6/10/97
Date

Brenda Bettencourt
Director, Region 9 Laboratory Program

6-17-97
Date

For the American Samoa Power Authority:

Abe U. Malae
Executive Director

7/25/97
Date

ATTACHMENT 1

Standard Operating Procedure for American Samoa WWTP Sample Collection, Flow-Weight Calculation, and Sample Shipping

Equipment provided by USEPA every quarter

27 sample bottles (40 mL VOA vials), including one marked "Temperature Blank"
10 mL graduated cylinder
Sample bottle labels
Chain of custody form
Chain of custody seals
Stainless steel collection pitcher
Cooler
Ziplock bags
Bubble wrap or VOA foam containers
Sharpie permanent pen
Tape

Background

The Utulei and Tafuna WWTP NPDES permits require toxicity tests be conducted periodically, utilizing 24-hour flow-weighted composite effluent samples. For each sewage treatment plant, one grab sample shall be collected each hour over a 24-hour period, for a total of 24 samples. The proportional amount of effluent from each sample will be calculated based on flow, and combined to make up the final composited sample to be submitted for analysis.

Sample collection

Samples should be collected by WWTP staff collecting grab samples over a 24-hour period that are ultimately flow-weight composited. A stainless steel or borosilicate glass pitcher will be used to collect the wastewater from the effluent discharge point. The pitcher will be rinsed in the effluent twice before collecting the liquid to be sampled.

Every hour for 24 hours, an operator should fill one 40 mL VOA vial with effluent and fill in the sampling time and flow data on the composite sampling sheet (**FLOW WEIGHT COMPOSITE WORKSHEET**) and on the bottle label (using a permanent marker). Samples should be kept in coolers with ice (or refrigerated) and maintained at 4°C. See **INSTRUCTIONS FOR FLOW-WEIGHT SAMPLE COLLECTION and CALCULATIONS** for more detail.

Flow-weight calculations

Flow charts or flow data from the 24-hour interval of sampling will be obtained from each plant. Flow data will be inputted into the **FLOW WEIGHT COMPOSITE WORKSHEET**

to calculate the volume of sample from each grab sample that is to make up the final flow-proportioned sample based on all grab samples collected. This is the final composited sample. All leftover effluent grab samples from the 24-hour sampling should be emptied and bottles disposed. See INSTRUCTIONS FOR FLOW-WEIGHT SAMPLE COLLECTION and CALCULATIONS for more detail. The original flow weight composite worksheet should be maintained at the facility for NPDES records.

Sample identification, packaging and shipment

All samples will be shipped to the Region IX Laboratory the day sampling is completed. All samples should be shipped to:

Nancy Wilson
Region IX Laboratory
1337 S. 46th St., Bldg. 201
Richmond, CA 94804 USA
(510) 412-2377

Samples must be shipped via a carrier (e.g. DHL, Federal Express) which will ensure their arrival at the EPA laboratory on a weekday, and within the specified holding time (optimum 36 hours; not to exceed 72 hours).

Amy Wagner will be notified of each shipment by telephone (510-412-2329) or fax (510-412-2304) the day of shipping. The caller should state the number of coolers being shipped, time of shipment, name of courier service, and airbill number. All information entered on the sample label will be in indelible ink with a Sharpie pen. The following information will be recorded on the label:

1) Sample number (Facility name);
2) Date of collection (enter 2 dates for 24-hour samples);
3) Time of collection (enter military time the last sample in composite was collected);
4) Analysis requested (Urchin Toxicity);
5) Preservation (Ice);
6) Sampler (Sampler's Name)

A chain of custody form should be filled out as shown in **Example Chain of Custody Record.** The areas highlighted are the responsibility of the sampler. Any complications encountered during sampling should be noted on the chain of custody form in the "Remarks" section. A copy of the worksheets recording flow-weight calculations should be sent along with the Chain of Custody Record in a ziplock bag.

Each of the two final composited samples in VOA vials should be sealed with a custody seal around the circumference of the cap. The sample bottles will be wrapped in three layers of bubble wrap and taped or placed in a foam vial holder, sealed in a ziplock bag, and placed on

leftover samples from each hourly grab after filling the 2 VOA vials.

5. Keep worksheets with time, flow, and flow-weight volumes on file at the facility. Follow SOP for packaging and shipping samples.

An example is attached (**FLOW WEIGHT COMPOSITE EXAMPLE**) to practice flow-weight composite calculations.

INSTRUCTIONS FOR FLOW-WEIGHT SAMPLE COLLECTION and CALCULATIONS

Hourly collections

1. Record time of sample collection in "Time" column (row "B") for each sample. Record time on bottle filled.

2. Record flow in "Flow" column (row "C") for each sample (in any units as long as they are consistent--millions gallons per hour-mgh, millions gallons per day-mgd). Flow value can be obtained from flow chart recordings or digital display as close to time of sample collection as possible. Record flow on bottle filled.

3. Put your initials in "Initials" column (column "E") on worksheet and on bottle when both 1 and 2 are completed.

4. Keep VOA vial in refrigerator or on ice in a cooler to maintain sample at 4°C.

Compositing sample at end of sample collection

A sample table is provided for recording and calculating flow-weighted volumes for each sample collected. A computer disk is also provided containing the table and formulas for the calculations in LOTUS 1-2-3 Version 4.0 format and Excel 7.0, which will automatically calculate the volumes when the flow data is inputted.

1. At the end of the 24-hour sampling period, add up all 24 flow values and record value as "Total Flow". (If utilizing the Lotus table provided, input the flow data for each sample and the "Total Flow" value will be entered automatically in cell C31.)

2. Divide each sample's hourly flow value by the sum of all flow values (Total Flow or C31 value) and multiply by 100. All numbers should be rounded to the nearest integer (ie. 5, not 4.9). Put values in "Flow-weighted Volume" column for each hourly calculation. (If utilizing the Lotus 1-2-3 table, this volume will be calculated automatically and the value will appear in this column once all the flow data have been entered.)

3. Add all 24 values in "Flow-weighted Volume"; the total should be 100. If the total is not 100, check rounding of values.

4. Measure the "Flow-weighted" volume specified for each sample into the sample pitcher until all 24 grab samples have been composited into the pitcher. (There should be 100 ml. of effluent in the pitcher). Stir the mixture for 20 seconds and pour the final composite sample into each of 2 VOA 40 mL vials. Label 2 VOA vials "Final composite" and put time and date of LAST sample collected (24th hour). Discard the 20 mL extra composite sample and all

top of a layer of foam on the bottom of the cooler. The temperature blank provided should be packaged the same and sent along with the samples. The temperature blank does not need to be recorded on the chain of custody record as a sample. All samples will be placed in a shipping cooler with bubble wrap filling any loose space and a sufficient amount (at least one 1-gallon ziplock bags full) of double-bagged ice placed *on top* of the samples to ensure that ice will still be present when the samples arrive at the laboratory. Samples MUST be kept at 4 degrees C from the time they are collected until they are unpacked at the laboratory. A chain-of-custody form will be prepared, placed in a ziplock bag and sent with the samples in a cooler. All sampling equipment (ie. graduated cylinder, sampling pitcher) should be rinsed and returned in the shipping cooler. Cooler will be sealed thoroughly with strapping tape especially around the cover to insure an airtight seal.

FLOW WEIGHT COMPOSITE EXAMPLE

Name of Facility _____

Dates of Sample Collection _____

BOTTLE #	TIME	FLOW (mgd)	FLOW-WEIGHT VOLUME (mL)	Formula for D
1	1800	4	4/117*100=3	C7/C31*100
2	1900	5	5/117*100=4	C8/C31*100
3	2000	5	5/117*100=4	C9/C31*100
4	2100	5	5/117*100=4	C10/C31*100
5	2200	5	5/117*100=4	C11/C31*100
6	2300	6	6/117*100=5	C12/C31*100
7	2400	6	6/117*100=5	C13/C31*100
8	100	7	7/117*100=6	C14/C31*100
9	200	6	6/117*100=5	C15/C31*100
10	300	6	6/117*100=5	C16/C31*100
11	400	5	5/117*100=4	C17/C31*100
12	500	4	4/117*100=3	C18/C31*100
13	600	3	3/117*100=3	C19/C31*100
14	700	3	3/117*100=3	C20/C31*100
15	800	3	3/117*100=3	C21/C31*100
16	900	3	3/117*100=3	C22/C31*100
17	1000	3	3/117*100=3	C23/C31*100
18	1100	3	3/117*100=3	C24/C31*100
19	1200	5	5/117*100=4	C25/C31*100
20	1300	6	6/117*100=5	C26/C31*100
21	1400	6	6/117*100=5	C27/C31*100
22	1500	6	6/117*100=5	C28/C31*100
23	1600	6	6/117*100=5	C29/C31*100
24	1700	6	6/117*100=5	C30/C31*100
		Sum C7-.C30=117	Sum D7- D30=100	

FLOW WEIGHT COMPOSITE WORKSHEET

A	A	B	C	D	E
1	Name of Facility _____				
2					
3	Dates of Sample Collection _____				
4					
5	BOTTLE #	TIME	FLOW (mgd)	FLOW-WEIGHTED VOLUME (mL)	INITIALS
6					
7	1				
8	2				
9	3				
10	4				
11	5				
12	6				
13	7				
14	8				
15	9				
16	10				
17	11				
18	12				
19	13				
20	14				
21	15				
22	16				
23	17				
24	18				
25	19				
26	20				
27	21				
28	22				
29	23				
30	24				
31			Total Flow		

Attachment 4:

STANDARD NPDES PERMIT CONDITIONS

1. Duty to Reapply [40 CFR 122.21(d)]

The Permittee shall submit a new application 180 days before the existing permit expires. 122.2(c)(2) POTW's with currently effective NPDES permits shall submit with the next application the sludge information listed at 40 CFR 501.15(a)(2).

2. Applications [40 CFR 122.22]

a. All applications shall be signed as follows:

1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principle business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

b) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

3) For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits and other information requested by the Director shall be signed by a person described in paragraph (a) of this Section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1) The authorization is made in writing by a person described in paragraph (a) of this section;

2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the

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

3) The written authorization is submitted to the Director.

c. Changes to Authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

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

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

3. Duty to Comply [40 CFR 122.41(a)]

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

a. The permittee shall comply with the effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulation that establish these standards or

prohibitions, even if the permit has not yet been modified to incorporate the requirement.

b. The Clean Water Act provides that:

1) Any person who causes a violation of any condition in this permit is subject to a civil penalty not to exceed $25,000 per day of each violation. Any person who negligently causes a violation of any condition in this permit is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both for a first conviction. For a second conviction, such a person is subject to a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two years, or both. [Updated pursuant to the Water Quality Act of 1987]

2) Any person who knowingly causes a violation of any condition of this permit is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than three years, or both for a first conviction. For a second conviction, such a person is subject to a fine of not more than $100,000 per day of violation, or by imprisonment for not more than six years, or both. [Updated pursuant to the Water Quality Act of 1987]

3) Any person who knowingly causes a violation of any condition of this permit and, by doing so, knows at that time that he thereby places another in imminent danger of death or serious bodily injury shall be subject to a fine of not less than $250,000, or imprisonment for not more than 15 years, or both. A person who is an organization and violates this provision shall be subject to a fine of not more than $1,000,000 for a first conviction. For a second conviction under this provision, the maximum fine and imprisonment shall be doubled. [Updated pursuant to the Water Quality Act of 1987]

4. Need to Halt or Reduce Activity Not a Defense [40 CFR 122.41(c)]

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

5. Duty to Mitigate [40 CFR 122.41(d)]

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation

of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance [40 CFR 122.41(e)]

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

7. Permit Actions [40 CFR 122.41(f)]

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

8. Property Rights [40 CFR 122.41(g)]

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

9. Duty to Provide Information [40 CFR 122.41(h)]

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

10. Inspection and Entry [40 CFR 122.41(i)]

The Permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and such other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the terms of the permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring equipment or control equipment), practices or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. Monitoring and Records [40 CFR 122.41(j)]

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application, except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Director at any time.

c. Records of monitoring information shall include:

1) The date, exact place and time of sampling or measurements;

2) The individual(s) who performed the sampling or measurements;

3) The date(s) the analyses were performed;

4) The individual(s) who performed the analyses;

5) The analytical techniques or methods used; and

6) The results of such analyses.

d. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, or in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless test procedures have been specified in this permit.

e. The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both for first conviction. For a second conviction, such a person is subject to a fine of not more than $20,000 per day of violation, or imprisonment for not more than four years, or both. [Updated pursuant to the Water Quality Act of 1987]

12. Signatory Requirement [40 CFR 122.41(k)]

a. All applications, reports, or information submitted to the Director shall be signed and certified. (See 40 CFR 122.22)

b. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both for a first conviction. For a second conviction, such a person is subject to a fine of not more than $20,000 per day of violation, or imprisonment of not more than four years, or both. [Updated pursuant to the Water Quality Act of 1987]

13. Reporting Requirements [40 CFR 122.41(l)]

a. Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations of additions to the permitted facility. Notice is required only when:

1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).

3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change

may justify the application of permit conditions that are different from or absent in the existing permit including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

c. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory).

d. Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

1) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

2) If the Permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, as specified in the permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR, or sludge reporting form specified by the Director.

3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

e. Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

f. Twenty-four hour reporting.

1) The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

2) The following shall be included as information which must be reported within 24 hours under this paragraph.

a) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(g))

b) Any upset which exceeds any effluent limitation in the permit.

c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g))

g. Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (6) of this section.

h. Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

14. Bypass [40 CFR 122.41(m)]

a. Definitions

1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or

substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

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

c. Notice.

1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of bypass.

2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (a)(6) of section 13 (24-hour notice).

d. Prohibition of bypass.

1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c) The permittee submitted notices as required under paragraph (3) of this section.

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

15. Upset [40 CFR 122.41(n)]

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defenses of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1) An upset occurred and that the permittee can identify the cause(s) of the upset;

2) The permitted facility was at the time being properly operated; and

3) The permittee submitted notice of the upset as required in paragraph 13)(6)(ii)(B) (24-hour notice).

4) The permittee complied with any remedial measures required under 40 CFR 122.41(d).

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

16. Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers [40 CFR 122.42(a)]

In addition to the reporting requirements under 40 CFR 122.41(l), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the

permit, if that discharge will exceed the highest of the following "notification levels":

1) One hundred micrograms per liter (100 µg/l);

2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

3) Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

4) The level established by the Director in accordance with 40 CFR 122.44(f).

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

1) Five hundred micrograms per liter (500 µg/l);

2) One milligram per liter (1 mg/l) for antimony;

3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7);

4) The level established by the Director in accordance with 40 CFR 122.44(f).

17. Publicly Owned Treatment Works [40 CFR 122.42(b)]

This section applies only to publicly owned treatment works as defined at 40 CFR 122.2.

a. All POTW's must provide adequate notice to the Director of the following:

1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of the CWA if it were directly discharging those pollutants; and

2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

3) For the purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharge from the POTW.

b. [The following condition has been established by Region 9 to enforce applicable requirements of the Resource Conservation and Recovery Act] Publicly owned treatment works may not receive hazardous waste by truck, rail, or dedicated pipe except as provided under 40 CFR 270. Hazardous wastes are defined at 40 CFR 261 and include any mixture containing any waste listed under 40 CFR 261.31 - 261.33. The Domestic Sewage Exclusion (40 CFR 261.4) applies only to wastes mixed with domestic sewage in a sewer leading to a publicly owned treatment works and not to mixtures of hazardous wastes and sewage or septage delivered to the treatment plant by truck.

18. Reopener Clause [40 CFR 122.44(c)]

This permit shall be modified or revoked and reissued to incorporate any applicable effluent standard or limitation or standard for sewage sludge use or disposal under sections 301(b)(2)(C), and (D), 304(b)(2), 307(a)(2) and 405(d) which is promulgated or approved after the permit is issued if that effluent or sludge standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant or sludge use or disposal practice not limited in the permit.

19. Privately Owned Treatment Works

[The following conditions were established by Region 9 to enforce applicable requirements of the Resource Conservation and Recovery Act and 40 CFR 122.44(m)]

This section applies only to privately owned treatment works as defined at 40 CFR 122.2.

a. Materials authorized to be disposed of into the privately owned treatment works and collection system are typical domestic sewage. Unauthorized material are hazardous waste (as defined at 40 CFR Part 261), motor oil, gasoline, paints, varnishes, solvents, pesticides, fertilizers, industrial wastes, or other materials not generally associated with toilet flushing or personal hygiene, laundry, or food preparation, unless specifically listed under "Authorized Non-domestic Sewer Dischargers" elsewhere in this permit.

b. It is the permittee's responsibility to inform users of the privately owned treatment works and collection system of the prohibition against unauthorized materials and to ensure compliance with the prohibition. The permittee must have the authority and capability to sample all discharges to the collection system, including any from septic haulers or other unsewered dischargers, and shall take and analyze such samples for conventional, toxic, or hazardous pollutants when instructed by the permitting authority or by an EPA, State, or Tribal inspector. The permittee must provide adequate security to prevent unauthorized discharges to the collection system.

c. Should a user of the privately owned treatment works desire authorization to discharge non-domestic wastes, the permittee shall submit a request for permit modification and an application, pursuant to 40 CFR 122.44(m), describing the proposed discharge. The application shall, to the extent possible, be submitted using EPA Forms 1 and 2C, unless another format is requested by the permitting authority. If the privately owned treatment works or collection system user is different from the permittee, and the permittee agrees to allow the non-domestic discharge, the user shall submit the application and the permittee shall submit the permit modification request. The application and request for modification shall be submitted at least 6 months before authorization to discharge non-domestic wastes to the privately owned treatment works or collection system is desired.

20. Transfers by Modification [40 CFR 122.61(a)]

Except as provided in section 21, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under 40 CFR 122.62(b)(2)), or a minor modification made (under 40 CFR 122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under the CWA.

21. Automatic Transfers [40 CFR 122.61(b)]

An alternative to transfers under section 20, any NPDES permit may be automatically transferred to a new permittee if:

a. The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (2) of this section;

b. The notice includes a written agreement between the existing and new permittee containing a specific date for

transfer of permit responsibility, coverage, and liability between them; and

c. The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (2) of this section.

22. Minor Modification of Permits [40 CFR 122.63]

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

a. Correct typographical errors;

b. Require more frequent monitoring or reporting by the permittee;

c. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement;

d. Allow for a change in ownership or operational control of a facility where the Director determines that no other change in their permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Director.

e. Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation prior to discharge under 40 CFR 122.29.

f. Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with the permit limits.

g. When the permit becomes final and effective on or after March 9, 1982, conform to changes respecting 40 CFR

122.41(e), (l), (m)(4)(i)(B), (n)(3)(i), and 122.42(a) issued September 26, 1984.

h. Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 as enforceable conditions of the POTW's permit.

23. Termination of Permits [40 CFR 122.64]

The following are causes for terminating a permit during its term, or for denying a permit renewal application:

a. Noncompliance by the permittee with any condition of the permit;

b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

c. A determination that the permitted activity endangers human health or the environment and can only by regulated to acceptable levels by permit modification or termination; or

d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit (for example, a plant closure or termination of discharge by connection to a POTW).

24. Availability of Reports [Pursuant to Clean Water Act Section 308]

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

25. Removed Substances [Pursuant to Clean Water Act Section 301]

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

26. Severability [Pursuant to Clean Water Act Section 512]

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

27. Civil and Criminal Liability [Pursuant to Clean Water Act Section 309]

Except as provided in permit conditions on "Bypass" (Section 14) and "Upset" (Section 15), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

28. Oil and Hazardous Substance Liability [Pursuant to Clean Water Act Section 311]

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

29. State or Tribal Law [Pursuant to Clean Water Act Section 510]

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.