

**BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.**

In re:

City & County of Honolulu
Sand Island Wastewater Treatment Plant
Honouliuli Wastewater Treatment Plant

NPDES Permit Nos. HI0020117 & HI0020877

NPDES Appeal No. 09-01

**EXHIBITS TO
SUPPLEMENTAL BRIEF IN SUPPORT OF
CONSOLIDATED PETITION FOR REVIEW**

March 10, 2009

Exhibit A

Waianae 1999

PERMIT NO. HI 0020109

**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") and Chapter 342D, Hawaii Revised Statutes, and Chapters 11-54 and 11-55, Administrative Rules, Department of Health, State of Hawaii,

**CITY AND COUNTY OF HONOLULU
DEPARTMENT OF ENVIRONMENTAL SERVICES**

(hereinafter "PERMITTEE"),

is authorized to discharge secondary treated wastewater,

to the receiving waters named the Pacific Ocean through Outfall Serial No 001 at Latitude 21°25'36"N, Longitude 158°12'01"W,

and storm water runoff associated with industrial activity,

to the receiving waters named the Pacific Ocean through Outfall Serial No 002, owned and maintained by the State Department of Transportation drainage system, at Latitude 21°26'15"N, Longitude 158°11'17"W,

from its Waianae Wastewater Treatment Plant (hereinafter "FACILITY"),

located at 86-100 Farrington Highway, Waianae, Oahu, Hawaii,

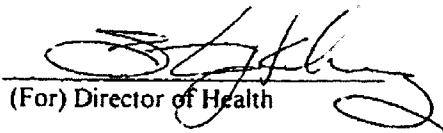
in accordance with the effluent limitations, monitoring requirements and other conditions set forth herein, and in the permit attachments, including the Department of Health "Standard NPDES Permit Conditions," dated May 3, 1999.

All references to Title 40 of the Code of Federal Regulations (40 CFR) are to regulations that are in effect on July 1, 1998, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in 40 CFR

This permit will become effective on October 20, 1999.

This permit and the authorization to discharge will expire at midnight,
September 30, 2003.

Signed this 20th day of September, 1999


(For) Director of Health

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based upon a design treatment capacity of 5.2 million gallons per day)

1. Limitations and Monitoring Requirements

During the period beginning with the effective date of this permit and lasting through **September 30, 2003**, the Permittee is authorized to discharge secondary-treated wastewater from Outfall Serial No. 001. The discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	DISCHARGE LIMITATION		UNIT	MINIMUM MONITORING FREQUENCY	SAMPLE TYPE
Flow ¹	N/A.		MGD	Continuous	Recorder or Totalizer
Biochemical Oxygen Demand (5-day) ¹	30-day Average	30	mg/l	5 Days/Week ⁴	24-Hour Composite
		590 ²	kg/day		
		85 ³	% Removal		
	7-day Average	45	mg/l		
		885 ²	kg/day		
Total Suspended Solids ¹	30-day Average	30	mg/l	5 Days/Week ⁴	24-Hour Composite
		590 ²	kg/day		
		85 ³	% Removal		
	7-day Average	45	mg/l		
		885 ²	kg/day		
pH Range	6.0 - 9.0 ⁵		Standard Unit	5 Days/Week ⁴	Grab
Total Nitrogen	N/A.		mg/l	Once/Month ⁶	24-Hour Composite
Ammonia Nitrogen	N/A.		mg/l	Once/Month ⁶	24-Hour Composite
Nitrate + Nitrite Nitrogen	N/A.		mg/l	Once/Month ⁶	24-Hour Composite
Total Phosphorus	N/A.		mg/l	Once/Month ⁶	24-Hour Composite
Turbidity	N/A.		N.T.U.	Once/Month ⁶	24-Hour Composite
Whole Effluent Toxicity ⁷	Chronic	117.84 ⁸	TU _c	Once/Month ⁶	24-Hour Composite
	Acute	11.78 ⁸	TU _a		
Enterococci	N/A.		#/100 ml	Once/Month ⁹	Grab

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PARAMETER	DISCHARGE LIMITATION	UNIT	MINIMUM MONITORING FREQUENCY	SAMPLE TYPE
Priority Pollutants ¹⁰	NA.	µg/l	Once/Year ¹¹	24-Hour Composite Grab ¹²

NA. No limitation at this time. Monitoring and reporting required only.
 MGD Million Gallons Per Day
 mg/l Milligrams Per Liter
 µg/l Micrograms Per Liter
 kg/day Kilograms Per Day
 ml Milliliters
 NTU Nephelometric Turbidity Units
 TU_c Chronic Toxicity Units
 TU_a Acute Toxicity Units

- 1 The Permittee shall monitor both the influent and effluent.
- 2 The mass emission rates are based on a discharge flow of 5.2 MGD
- 3 The 30-day average percent removal shall not be less than 85%.
- 4 The Permittee shall sample each day of the week (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday) at least once every two months.
- 5 The Permittee shall maintain the pH of the effluent within the limits of 6.0 and 9.0 unless the Permittee demonstrates that: (1) inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from the industrial sources do not cause the effluent discharge to be less than 6.0 or greater than 9.0.
- 6 "Once/Month" shall mean once per calendar month.
- 7 The Permittee shall conduct whole effluent toxicity monitoring in accordance with the provisions in Part B of this permit.
- 8 Limitation does not apply to monitoring results using *trypanestes gratilla*.
- 9 If the limitation in Part D.1 a is exceeded, then the Permittee shall increase monitoring to five days per month, where samples shall be equally spaced at six day intervals or unequally spaced at five, six, seven, or eight day intervals, provided that the total period covered is between 25 and 30 days. The Permittee shall not collect consecutive samples on the same day of the week. The Permittee shall continue this sampling frequency until the conditions in Part D.1 b are met.
- 10 Priority pollutants are listed under the Act Section 307(a) and in Attachment B of this permit. The priority pollutant scan shall exclude asbestos. Detection levels shall be reported and shall meet the requirements of 40 CFR Part 136.
- 11 "Once/Year" shall mean once per calendar year.
- 12 The Permittee shall analyze for cyanide and the volatile fraction of the toxic organic compounds with a grab sample. The Permittee shall analyze all other pollutants with composite sample.

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2. Sampling Locations

- a. The Permittee shall take all influent samples downstream of any additions to the trunk sewer, upstream of any in-plant return flows, and prior to treatment.
- b. The Permittee shall take all effluent samples downstream from any additions to the treatment plant and any in-plant return flows or disinfection units, and prior to mixing with the receiving waters
- c. The Permittee shall not change sampling locations without the notification to and the approval from the Director of Health.

B. WHOLE EFFLUENT TOXICITY LIMITATIONS AND MONITORING REQUIREMENTS

1. Chronic Toxicity Limitation and Monitoring Requirements

The Permittee shall conduct monthly chronic toxicity tests on flow-weighted 24-hour composite effluent samples in accordance with the procedures outlined below.

a. Limitation

The chronic toxicity discharge limitation is specified in Part A. 1 of this permit and does not apply to monitoring results for toxicity tests using *trypneustes gratilla*.

b. Test Species and Methods

The Permittee shall conduct chronic toxicity testing on the following species using the methods specified:

- (1) *Ceriodaphnia dubia* using Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms (EPA 600/4-91/002, July 1994);
- (2) *Trypneustes gratilla* using Hawaiian Collector Urchin, Trypneustes Gratilla (Hawa'e) Fertilization Test Method (Adapted by Amy Wagner, EPA Region 9 Laboratory, Richmond, CA from a method developed by George Morrison, EPA, ORD Narragansett, RI and Diane Nacci, Science Applications International Corporation, ORD Narragansett, RI).

If the Permittee uses static tests, the daily renewal solutions shall be fresh 24-hour composite samples, unless samples are shipped off-island to a contract laboratory in which case one 24-hour composite sample may be used for all renewals.

c. Quality Assurance

The Permittee shall test series of five dilutions and a control. The series shall include the instream waste concentration (IWC), two dilutions below the IWC, and two dilutions above the IWC. The chronic IWC for this discharge shall be 0.85 percent effluent.

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d. Exceptions

- (1) If the Permittee experiences difficulty in obtaining gametes or has unacceptable control performance while conducting the sea urchin sperm/fertilization bioassay during a monitoring period, the Permittee shall document its efforts, communicate all attempts to the Director of Health, and report all attempts on the discharge monitoring report for that monitoring period.
- (2) It shall not be a violation of this permit if it can be proven to the Director of Health's satisfaction that the inability to perform the tests as described above was due to circumstances beyond the Permittee's control
- (3) If the Permittee demonstrates that the chronic toxicity tests cannot be performed reliably, the Permittee may petition the Director of Health to perform acute toxicity tests in lieu of the chronic tests specified above. The acute toxicity tests shall be in accordance with the methods identified in Part B 2 below

2. Alternate Monitoring (Acute Toxicity Testing)

Beginning 30 days after written approval from the Director of Health to perform acute toxicity tests, the Permittee shall conduct, or have a contract laboratory conduct, monthly static or flow-through acute bioassays on composite effluent samples.

a. Limitation

The acute toxicity discharge limitation is specified in Part A.1 of this permit and becomes effective for the most sensitive species one (1) year after the commencement of acute toxicity tests.

b. Testing Procedures

- (1) The Permittee shall conduct the acute toxicity testing in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA 600/4-90/027F, August 1993.)
- (2) If necessary, the Permittee may adjust the salinity of a discharge using salts to allow testing with marine species.

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- (3) The Permittee shall conduct tests in 8.5 percent effluent for a period of 96 hours unless the methods specify a shorter period for a definitive test for a particular species (e.g., 48 hours for *daphnia*).
- (4) The Permittee shall test a series of five dilutions and a control. The series shall include the instream waste concentration (IWC), two dilutions below the IWC, and two dilutions above the IWC. The acute IWC for this discharge shall be 8.5 percent effluent.
- (5) If the Permittee uses static tests, the daily renewal solutions shall be fresh 24-hour composite samples, unless samples are shipped off-island to a contract laboratory in which case one 24-hour composite sample may be used for all renewals. The Permittee may conduct tests using locally available species at ambient temperature.

c. Species Selection

- (1) The Permittee shall select three species for monitoring from the EPA manual identified in Part B 2.a(1). The Permittee may use *Ceriodaphnia dubia* (life stage - 24 hours) in freshwater only. The Permittee shall submit the selection to the Director of Health for approval within 30 days after receiving written approval from the Director of Health to perform acute toxicity tests.
- (2) The Permittee shall obtain written approval from the Director of Health before changing any of the three selected species after the initial notification.
- (3) The Permittee shall conduct monitoring, at a minimum, on one of the three selected species each month. The Permittee shall rotate the three selected species on a monthly basis.

3. Toxicity Reduction Evaluation (TRE)

a. Preparation of Initial Investigation TRE Workplan

The Permittee shall submit an initial investigation TRE workplan (approximately 1-2 pages) within 120 days of the effective date of this permit. This workplan shall describe steps which the Permittee intends to follow in the event that toxicity is detected, and at a minimum, shall include the following:

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- (1) A description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, and 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; and
 - (3) If a toxicity identification evaluation (TIE) is necessary, the identification of who (e.g. contract laboratory, etc) will conduct the evaluation.
- b Increase in Monitoring and Reporting Requirement
- (1) If the Permittee violates the whole effluent toxicity limitation after it becomes effective, the Permittee shall increase the whole effluent toxicity monitoring frequency and reporting to once per week.
 - (2) The monitoring frequency and reporting shall remain at once per week until the Permittee has complied with the whole effluent toxicity limitation six consecutive times.
 - (3) After the whole effluent toxicity limitation has been met six consecutive times, monitoring and reporting shall return to a monthly basis.
- c. Toxicity Reduction Evaluation/Toxicity Identification Evaluation (TRE/TIE)
- (1) If the Permittee has two consecutive violations of the whole effluent toxicity limitation, or if requested by the Director of Health, the Permittee shall initiate a TRE in accordance with the Permittee's initial investigation TRE workplan and the manual entitled Toxicity Reduction Evaluation Protocol for Municipal Wastewater Treatment Plants (EPA/600/2-88/062, 1989).
 - (2) The Permittee shall also submit a detailed TRE workplan within 45 days after the second violation or request by the Director of Health. The detailed TRE workplan should include the following:
 - (a) Further actions to investigate/identify the causes of toxicity,

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- (b) Actions the Permittee will take or has taken to mitigate the impact of the discharge, to correct the noncompliance, and to prevent the recurrence of toxicity; and
 - (c) A schedule under which these action will be implemented
- (3) As part of the TRE process, the Permittee shall initiate a TIE to identify the causes of toxicity using the following manuals:
- (a) EPA/600/6-91/005F (Phase I)
 - (b) EPA/600/R-92/080 (Phase II)
 - (c) EPA/600/R-92/081 (Phase III)

4 Sampling Frequency Reduction

- a. If the Permittee has not violated the whole effluent toxicity limitation after completing 24 consecutive months of testing, the Permittee may request a reduction in monitoring frequency.
- b. Any such reduction of the monitoring frequency must be approved by the Director of Health in writing, and shall be at the Director of Health's sole discretion.
- c. A reduction in frequency to once per year or more frequent shall be considered a minor modification for the purposes of 40 CFR Part 124
- d. If the Permittee violates the whole effluent toxicity limitation after a reduction in monitoring frequency becomes in effect, the monitoring frequency shall return to once per month for the duration of the permit.

Nothing in Part B waives any remedy or penalty applicable under Chapter 342D, Hawaii Revised Statutes.

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C. STORM WATER LIMITATIONS AND MONITORING REQUIREMENTS

1. Limitations and Monitoring Requirements

During the period beginning with the effective date of this permit and lasting through **September 30, 2003**, the Permittee is authorized to discharge storm water runoff associated with industrial activities from Outfall Serial No. 002, owned and maintained by the State Department of Transportation. The discharges exiting the facility prior to entering the State Department of Transportation drainage system shall be limited and monitored by the Permittee as specified below:

PARAMETER	DISCHARGE LIMITATION	UNITS	MEASUREMENT FREQUENCY	TYPE OF SAMPLE ¹
Flow	N/L	MGD	Once/Year ²	Calculated or Estimated
Biochemical Oxygen Demand (5-Day)	N/L	mg/l	Once/Year ²	Composite/ Grab
Chemical Oxygen Demand	N/L	mg/l	Once/Year ²	Composite/ Grab
Total Suspended Solids	N/L	mg/l	Once/Year ²	Composite/ Grab
Total Phosphorus	N/L	mg/l	Once/Year ²	Composite/ Grab
Total Nitrogen	N/L	mg/l	Once/Year ²	Composite/ Grab
Nitrate + Nitrite Nitrogen	N/L	mg/l	Once/Year ²	Composite/ Grab
Oil and Grease	15	mg/l	Once/Year ²	Grab
pH Range	7.6 - 8.6	Standard Units	Once/Year ²	Grab
Copper (total recoverable) ³	2.9 ⁴	µg/l	Once/Year ²	Composite/ Grab
Zinc (total recoverable) ³	95 ⁴	µg/l	Once/Year ²	Composite/ Grab

N/L. No Limitation at this time. Only monitoring and reporting required.
 N/A Not Applicable.
 MGD Million gallons per day
 mg/l Milligrams per liter
 µg/l Micrograms per liter

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1 The Permittee shall collect samples from a discharge resulting from a representative storm. A representative storm means a rainfall that accumulates more than 0.1 inch of rain and occurs at least seventy-two hours after the previous measurable (greater than 0.1 inch) rainfall.

The Permittee shall collect samples for analysis during the first fifteen minutes of the discharge and at fifteen-minute intervals thereafter for the duration of the discharge. If the discharge lasts for over an hour, sample collection may cease.

If the Permittee was unable to collect two or more samples, then the sample collected during the first 15 minutes shall be analyzed as a grab sample for all parameters listed in the table under Part C.1.

If the Permittee was able to collect two or more samples, then the Permittee shall combine all samples* to form a composite sample, as defined below. The Permittee shall use the composite sample to analyze for all parameters under Part C.1 except where indicated that only a grab sample can be used.

*The Permittee shall retain some of the sample collected during the first 15 minutes of the storm event in order to perform analyses for those parameters where only a grab sample can be used.

"Composite sample" means a combination of at least two sample aliquots collected at periodic intervals. The composite shall be flow proportional; either the time interval between each aliquot or the volume of each aliquot shall be proportional to either the flow at the time of sampling or total flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.

2 "Once/Year" shall mean once per calendar year beginning in the year 2000.

3 The Permittee may request to discontinue monitoring for this parameter if the Permittee can prove to the Director of Health's satisfaction that the discharge limitation exceedances are not a result of the facility or its operations.

4 The Department may modify the numerical effluent limitation when a site-specific translator between the dissolved fraction and total recoverable forms has been developed by the Permittee and approved by the Director of Health.

2 **Sampling Locations**

The Permittee shall sample the storm water runoff prior to entering the State Department of Transportation storm drainage system.

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3. Storm Water Pollution Control Plan
 - a. The Permittee shall continue to implement its Storm Water Pollution Control Plan (SWPCP) dated November 24, 1997
 - b. The Permittee shall revise the SWPCP should any discharge limitation be exceeded. The revisions shall include measures to reduce the amount of pollutants found to be in exceedance from entering storm water runoff.
 - c. The Permittee shall review and update the SWPCP as often as needed or required by the Director of Health. The Permittee shall report any major changes to the SWPCP to the Director within 30 days from the date the changes were made. The Permittee shall maintain documentation of all changes made to the SWPCP.
 - d. The Permittee shall maintain a copy of the SWPCP at the facility.

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D. SPECIFIC CRITERIA FOR RECREATIONAL AREAS

1. Limitations and Monitoring Requirements

- a. Within 300 meters (1000 feet) of the shoreline, including natural public bathing or wading areas, the enterococci content shall be limited and monitored by the Permittee as specified below:

PARAMETER	LIMITATION	UNIT	MINIMUM MONITORING FREQUENCY	SAMPLE TYPE
Enterococci	70	#/100 ml	Once/Month ¹	Grab

ml Milliliters

¹ Monitoring shall be conducted on the same day that effluent sampling for enterococci is conducted.

- b. If the enterococci limitation in Part D.1.a above is exceeded, then the Permittee shall conduct monitoring as described below:

PARAMETER	LIMITATION (geometric mean)	UNIT	MINIMUM MONITORING FREQUENCY	SAMPLE TYPE
Enterococci	7	#/100 ml	5 Days/Month ¹	Grab

ml Milliliters

¹ Monitoring shall be conducted on the same day that effluent sampling for enterococci is conducted. Samples shall be equally spaced at six day intervals or unequally spaced at five, six, seven, or eight day intervals, provided that the total period covered is between 25 and 30 days. Consecutive samples shall not be collected on the same day of the week.

- c. The Permittee shall conduct monitoring in accordance with Part D.1.b until the geometric mean limitation can be met at least three consecutive times and the cause of the high bacterial counts can be determined, or unless otherwise instructed by the Director of Health.

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- d. Marine recreational waters along sections of coastline where enterococci content does not exceed the standard, as shown by the geometric mean test described above, shall not be lowered in quality.
- e. The Permittee shall conduct enterococci analyses in accordance with the following procedures:
 - (1) Standard Methods, 19th Edition;
 - (2) Method 1600: Membrane Filter Test Method for Enterococci in Water, EPA-821-R97-004, May 1997; and/or
 - (3) Method 1106.1 Test Method for Enterococci in Water by the Membrane Filter Method, EPA-600/4-85/076, 1985.

2 Exceptions

Inability to conduct enterococci monitoring due to inclement weather or hazardous conditions which may endanger the lives of the Permittee's personnel shall not constitute a violation of this permit.

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E. ZONE OF MIXING LIMITATIONS AND MONITORING REQUIREMENTS

1 Design Criteria

- a. The Zone of Mixing shall be established for the assimilation of secondary treated wastewater at a design flow of 5.2 MGD.
- b. The Zone of Mixing shall consist of a rectangular prism having a length of 746.0 feet and a width of 218.5 feet. The diffuser is centered on the longitudinal axis of the Zone of Mixing.

2 Limitations and Monitoring Requirements

The boundaries of the Zone of Mixing shall be limited and monitored by the Permittee as specified below:

PARAMETER	GEOMETRIC MEAN NOT TO EXCEED THE GIVEN VALUE	NOT TO EXCEED THE GIVEN VALUE MORE THAN TEN PERCENT OF THE TIME	NOT TO EXCEED THE GIVEN VALUE MORE THAN TWO PERCENT OF THE TIME	UNIT	MINIMUM MONITORING FREQUENCY	SAMPLE TYPE
Total Nitrogen	110.00	180.00	250.00	µg/l	Once/Quarter ¹	Grab ²
Ammonia Nitrogen	2.00	5.00	9.00	µg/l	Once/Quarter ¹	Grab ²
Nitrate + Nitrite Nitrogen	3.50	10.00	20.00	µg/l	Once/Quarter ¹	Grab ²
Total Phosphorous	16.00	30.00	45.00	µg/l	Once/Quarter ¹	Grab ²
Chlorophyll a	0.15	0.50	1.00	µg/l	Once/Quarter ²	Grab ²
Turbidity	0.20	0.50	1.00	N.T.U.	Once/Quarter ¹	Grab ²
pH Range	7.6 - 8.6			Standard Unit	Once/Quarter ²	C.D.P.
Dissolved Oxygen	Not less than 75% Saturation			% Saturation	Once/Quarter ¹	C.D.P.

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PARAMETER	GEOMETRIC MEAN NOT TO EXCEED THE GIVEN VALUE	NOT TO EXCEED THE GIVEN VALUE MORE THAN TEN PERCENT OF THE TIME	NOT TO EXCEED THE GIVEN VALUE MORE THAN TWO PERCENT OF THE TIME	UNIT	MINIMUM MONITORING FREQUENCY	SAMPLE TYPE
Temperature	Shall not vary more than 1 C from ambient conditions			C	Once/Quarter ¹	C D P
Salinity	Shall not vary more than 10% from natural or seasonal changes considering hydrologic input and oceanographic factors			PPT	Once/Quarter ²	C D P

µg/l Micrograms Per Liter
 N.T.U Nephelometric Turbidity Units
 C.D.P Continuous Depth Profile
 °C Degrees Celsius
 PPT Parts Per Thousand

¹ The Permittee shall conduct Zone of Mixing monitoring on the same day that the recreational area and effluent sampling are conducted

² The Permittee shall monitor surface, mid-depth and bottom.

3 Sampling Locations

The Permittee shall establish at least four sampling stations along the boundaries of the Zone of Mixing.

4 Ocean Outfall Monitoring

At least once during the term of this permit, the Permittee shall inspect the ocean outfall and submit the investigation findings to the Director of Health. The outfall inspection shall include, but not be limited to, the investigation of the structural integrity, operational status, and maintenance needs.

5 Exceptions

The following circumstances shall not constitute violations to this permit:

- a. Exceedances of limitations specified in Part E 2 within the boundaries of the Zone of Mixing;

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- b. Inability to conduct Zone of Mixing monitoring due to inclement weather or hazardous conditions which may endanger the lives of the Permittee's personnel

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F. SPECIFIC WATER QUALITY PARAMETERS EFFLUENT REQUIREMENTS

1. Monitoring Requirements

The Permittee shall monitor the effluent for total nitrogen, ammonia nitrogen, nitrate + nitrite nitrogen, and total phosphorus in accordance with Part A of this permit. The specific water quality parameters monitored shall not exceed the following operations performance threshold values more than once in 12 consecutive months:

PARAMETER	THRESHOLD VALUE	UNITS	MONITORING FREQUENCY	TYPE OF SAMPLE
Total Nitrogen	35.0	mg/l	Once/Month ¹	24-hour Composite
Ammonia Nitrogen	25.0	mg/l	Once/Month ²	24-hour Composite
Nitrate + Nitrite Nitrogen	30.0	mg/l	Once/Month ²	24-hour Composite
Total Phosphorus	7.0	mg/l	Once/Month ²	24-hour Composite

mg/l Milligrams Per Liter

¹ "Once/Month" shall mean once per calendar month.

2. Initial Investigation Evaluation Plan

a. Within 120 days after the effective date of this permit, the Permittee shall submit an initial investigation evaluation plan. At a minimum, the plan shall include a brief description of the investigation and evaluation techniques that would be used to identify potential causes of the following:

- (1) Any exceedance of the parameters listed in the table under Part F 1.
- (2) Effluent variability; and
- (3) Treatment system efficiency.

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- b. If the monitoring results exceed any of the threshold values specified in Part F.1, the Permittee shall conduct an initial investigation evaluation in accordance with their plan and submit the results of the evaluation with the Discharge Monitoring Report for that monitoring period.

3. **Increase in Monitoring and Reporting Requirements**

If the Permittee exceeds or will exceed the criteria for any parameter specified in Part F.1 more than once in 12 consecutive months, the Permittee shall increase the monitoring frequency and reporting for those parameters in exceedance to once per week. The monitoring frequency and reporting shall remain at once per week until the monitoring results are below the threshold value for three consecutive weeks. After this is achieved, monitoring and reporting for those parameters shall return to once per month.

4. **Reduction Evaluation Plan**

- a. If the Permittee exceeds or will exceed the criteria for any parameter specified in Part F.1 more than twice in 12 consecutive months, or if requested by the Director of Health, the Permittee shall submit a reduction evaluation plan and implementation schedule within 45 calendar days after the third exceedance or request by the Director of Health.
- b. The reduction evaluation shall determine the cause of exceedance, outline measures that will be or have been implemented to ensure compliance with the criteria, and include an implementation schedule.
- c. Upon completion of the reduction evaluation, this permit may be modified, or alternatively revoked and reissued, in order to incorporate appropriate permit conditions and implementation schedules.

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G. SLUDGE REQUIREMENTS

1. **General Conditions and Requirements**

a. **Acceptable Sludge Use/Disposal Practices**

- (1) The Permittee shall dispose of all sludge generated by the Permittee in a municipal solid waste landfill, disposed of in a sludge surface disposal site, land applied, or transferred to another party for further treatment, use, or disposal in accordance with all applicable portions of 40 CFR Parts 257, 258, 503 and HAR Chapters 11-58.1 and 11-62.
- (2) Storage of sludge for over two years from the time it is generated shall be considered to be surface disposal. The storage site shall meet all the requirements of a surface disposal site under 40 CFR Part 503 Subpart C and HAR Chapters 11-58.1 and 11-62. If the Permittee desires to store sludge for longer periods of time prior to final disposal, the Permittee shall submit a written request to the EPA Regional Sludge Coordinator and Director of Health containing the information required under 40 CFR Section 503.20(b).
- (3) The Permittee shall dispose of sludge containing more than 50 mg/kg of PCBs in accordance with 40 CFR Part 761.
- (4) If the Permittee desires to dispose of sludge using a method not listed above, the Permittee shall submit a request for permit modification to EPA Regional Sludge Coordinator and Director of Health 180 days prior to commencement of the alternate disposal practice.

b. **Duty to Mitigate**

- (1) The Permittee shall be responsible for ensuring the following:

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- (a) All sludge produced at its facility is used/disposed of in accordance with 40 CFR Parts 257, 258, 503, and HAR Chapters 11-58.1 and 11-62, whether the Permittee uses/disposes of the sludge itself or transfers it to another party for further treatment, use, or disposal
 - (b) Subsequent preparers, applicers, or disposers of the sludge are informed of the requirements under 40 CFR Parts 257, 258, 503, and HAR Chapters 11-58.1 and 11-62.
 - (c) Sludge is not allowed to enter waters of the United States, or to contaminate an underground drinking water source.
 - (d) Sludge treatment, storage, use, and disposal does not create a public nuisance; and
 - (e) Haulers who ship non-Class A sludge off-site for additional treatment, use, or disposal take all necessary measures to keep sludge contained.
- (2) The Permittee shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.

c. Other Conditions

- (1) The Director of Health may promptly modify or revoke and reissue this permit to incorporate any applicable standard for sewage sludge use or disposal promulgated under the Act Section 405(d), or adopted under HRS Chapter 342D or HAR Chapter 11-62, if the standard is more stringent than the standard in this permit or covers a pollutant or practice not covered in this permit.
- (2) The sludge requirements in this part are supplemental to the other conditions of this permit. In the event of a conflict, those requirements more protective of the environment shall apply.
- (3) The requirements in 40 CFR Part 503 are enforceable by the EPA independently of being included in this permit.

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2. **Sludge Limitations and Monitoring Requirements**

a. Sludge shall be limited and monitored by the Permittee as specified below depending on the use/disposal method utilized.

(1) **Sludge Disposed of in Municipal Solid Waste Landfills**

MONITORING PARAMETER/ TEST PROCEDURES	LIMITATION	MONITORING FREQUENCY
Paint Filter Test (SW-486, EPA Method 9095)	No "Free Liquids" ¹	Once/ Batch (Minimum)
Toxicity Characteristic Leaching Procedure (TCLP) Test ²	1	Once Year
Priority Pollutants ³	N/A	Once/Year ⁴

N/A Not Applicable

¹ "Free liquids" as defined in EPA Method 9095

² The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR Section 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic and in Attachment A of this permit.

³ Priority pollutants are listed under the Act Section 307(a) and in Attachment B of this permit.

⁴ The permittee shall test for priority pollutants more frequently if required under the pretreatment program.

(2) **Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)**

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MONITORING PARAMETER/ TEST PROCEDURES	LIMITATION (MG/KG)							MONITORING FREQUENCY
	0<25m	25<50m	50<75m	75<100m	100<125m	125<150m	>150m	
Arsenic ¹	30	34	39	46	53	62	73	¹
Chromium ¹	200	220	260	300	360	450	600	¹
Nickel ¹	210	240	270	320	390	420	420	¹
TCLP Test ³	³							Once/Year
Priority Pollutants ⁴	N/A							Once/Year ⁵

m Meter
 N/A Not Applicable

¹ The Permittee shall monitor for this parameter only if sludge is disposed of in a unit with no liner and leachate system. Limitations are based on the distance (meters) from the active sludge unit boundary to the nearest property line.

² Monitoring frequency shall be determined by the following table:

ANNUAL PRODUCTION, DRY WEIGHT (METRIC TONS/365 DAYS)	FREQUENCY
0 - 290	Once/Year
290 - 1,500	Once/Quarter
1,500 - 15,000	Once/60 days
Over 15,000	Once/month

³ The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR Section 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic and in Attachment A of this permit.

⁴ Priority pollutants are listed under the Act Section 307(a) and in Attachment B of this permit.

⁵ The Permittee shall test for priority pollutants more frequently if required under the pretreatment program.

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- (3) Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth)

MONITORING PARAMETER/ TEST PROCEDURES	LIMITATION (mg/kg)	MONITORING FREQUENCY
Arsenic	41	1
Cadmium	39	1
Copper	1,500	1
Lead	300	1
Mercury	17	1
Molybdenum	100	1
Nickel	420	1
Selenium	100	1
Zinc	2,800	1
TCLP test ²	2	Once/Year
Priority Pollutants ³	N/A	Once/Year ⁴

mg/kg Milligrams per kilogram
 N/A Not Applicable

- ¹ Monitoring frequency shall be determined by the following table:

ANNUAL PRODUCTION, DRY WEIGHT (METRIC TONS/365 DAYS)	FREQUENCY
0 - 290	Once/Year
290 - 1,500	Once/Quarter
1,500 - 15,000	Once/60 days
Over 15,000	Once/month

- ² The parameters to be tested by the TCLP test and their limitations are specified in 40 CFR Section 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic and in Attachment A of this permit.
- ³ Priority pollutants are listed under the Act Section 307(a) and under Attachment B of this permit.
- ⁴ The Permittee shall test for priority pollutants more frequently if required under the pretreatment program.

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- b. The Permittee shall develop a representative sampling plan for monitoring toxics reduction, including the number and location of sampling points.
 - (1) If sludge generated at the facility is land applied or disposed at a surface disposal site, the sampling plan shall also include pathogens and vector attraction reduction monitoring.
 - (2) If pathogen reduction is determined by time and temperature, the plan shall be designed to determine temperatures throughout the batch being treated.
 - (3) If windrow composting is used, temperature shall be measured at least once for each 150 feet of windrow, and include measurements at depths of 12 to 24 inches below the surface.
3. Requirements for Sludge Disposed of in Municipal Solid Waste Landfills
- a. Sludge shall be disposed of in municipal solid waste landfills that meet the requirements of 40 CFR Part 258 and HAR Chapter 11-58.1.
 - b. Sludge shall not contain "free liquids" as defined by EPA Method 9095 (Paint Filter Liquids Test).
4. Requirements for Sludge Disposed of in Surface Disposal Sites (Sludge-only Landfill or Disposal on Land Not for the Purpose of Improving Plant Growth)
- a. Sludge that is disposed of in a sludge-only landfill shall meet the general requirements, pollutant limits (for surface disposal sites without liners and leachate systems), management practices, and operational standards in 40 CFR Part 503 Subpart C and additional pollutant limits requested by the Director of Health.
 - b. The Permittee shall have a qualified groundwater scientist develop a groundwater monitoring program for the surface disposal site or certify that the placement of sludge on the site will not cause aquifer contamination.
5. Requirements for Sludge that is Land-Applied (Added to Soil for the Purpose of Improving Plant Growth)
- a. Exceptional quality sludge shall not be subject to the general requirements under 40 CFR Section 503.12 and management practices under 40 CFR Section 503.14 unless the Director of Health determines that these requirements are necessary to protect public health and the environment.
 - b. Preparers and applicators of non-exceptional quality sludge shall meet the general requirements and management practices specified in 40 CFR Part 503 Subpart B; Class A or B pathogen reduction levels with the associated access restrictions specified in 40 CFR Section 503.32, and one of the ten (10) vector attraction reduction requirements specified in 40 CFR Sections 503.33(b)(1) through 503.33(b)(10).

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- c. Preparers of non-exceptional quality sludge shall provide a written notification of the nitrogen content of the sludge to all applicers.
- d. Applicers of non-exceptional quality sludge shall determine the agronomic rate for the crops to be grown and certify that the sludge is applied at a rate not exceeding the agronomic rate determined for each crop.

6 Notification Requirements

- a. If sludge other than exceptional quality sludge is shipped to another state or to Indian lands, the Permittee shall send sixty (60) days prior notice of the shipment to the permitting authorities in the receiving state or Indian land (the EPA Regional Office for that area and the State or Indian authorities).
- b. The Permittee shall notify the EPA Regional Sludge Coordinator and the Director of Health of any non-compliance that may seriously endanger public health or the environment within 24 hours after becoming aware of the noncompliance. A written noncompliance report shall be submitted, postmarked, or faxed within five working days after the Permittee becomes aware of the noncompliance.
- c. The Permittee shall report all other instances of noncompliance not reported under Part G.6.b at the time discharge monitoring reports are submitted as required by Part J.1 of this permit.

7 Annual Report

By February 19th of each year, the Permittee shall submit an annual report on sludge management activities during the previous calendar year to the EPA Regional Sludge Coordinator and the Director of Health. The report shall provide the following information:

- a. The total amount of sludge generated that year and a breakdown of the usage/disposal methods employed (in dry weight, metric tons).
- b. Results of all monitoring required by Part G.2.
- c. If sludge was disposed in a municipal solid waste landfill, then the Permittee shall include the following certification statement:

"I certify under the penalty of law, that the paint filter test and toxicity characteristic leaching procedure test requirements have been met, and that vector attraction reduction requirements have been met by the municipal solid waste landfill. This determination has been made under my direction and supervision in accordance with the system designed to assure that qualified personnel properly gather and evaluate the information used to determine that the necessary requirements have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

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- d. If sludge was disposed in a surface disposal site, the following information shall be included
- (1) Requirements specified in 40 CFR Section 503.27;
 - (2) Name and mailing address of surface disposal operator if different from Permittee;
 - (3) Location (street address and latitude and longitude) of surface disposal site; and
 - (4) Results of groundwater monitoring, or a copy of a certification by a groundwater scientist (including the scientist's name, title, and phone number) that the placement of sludge at the surface disposal site will not cause aquifer contamination;
- e. If sludge was land-applied, the following information shall be included:
- (1) Requirements specified in 40 CFR Section 503.17(a) for all facilities preparing sludge for land application or reference to that facility's report, if submitted to EPA separately;
 - (2) Names and addresses of all facilities receiving the non-exceptional quality sludge, including land applicators and those facilities providing further treatment/blending prior to land application;
 - (3) Location of land application sites of non-exceptional quality sludge (street address latitude and longitude) and sizes of parcels;
 - (4) Crops grown, agronomic rate for the crops grown, and certification by the land applicators of non-exceptional quality sludge that the sludge was applied at a rate not exceeding the agronomic rate determined for each crop;
 - (5) Copies of other certification statements by land applicators of non-exceptional quality sludge;
- f. If sludge was stored, the following information shall also be included.
- (1) Age of stored sludge;
 - (2) Name and mailing address of operator of storage site if different from Permittee; and
 - (3) Location of stored sludge (street address, latitude and longitude); and
- g. If sludge was disposed using other methods, descriptions of the methods employed and the locations (street address, latitude and longitude) of the usage/disposal sites shall be included.

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Annual reports shall be submitted to the following agencies:

State of Hawaii
Department of Health
Environmental Management Division
Clean Water Branch
919 Ala Moana Boulevard, Room 301
Honolulu, HI 96814-4920

Regional Sludge Coordinator (WTR-7)
Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

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H. PRETREATMENT REQUIREMENTS

1. The Permittee shall be responsible and liable for the performance of all Control Authority (as defined in 40 CFR Section 403.12(a)) pretreatment requirements contained in 40 CFR Part 403, including any subsequent regulatory revisions. Where 40 CFR Part 403 or subsequent revisions place mandatory actions upon the Permittee as Control Authority but do not specify a timetable for completion of the actions, the Permittee shall complete the required actions within six months from the issuance date of this permit or the effective date of the 40 CFR Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Permittee shall be subject to enforcement actions, penalties, fines and other remedies by the EPA or other appropriate parties, as provided in the CWA. The DOH and EPA may initiate enforcement action against a nondomestic user for noncompliance with applicable standards and requirements, as provided in the CWA.
2. The Permittee shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d) and 402(b) of the CWA with timely, appropriate and effective enforcement actions. The Permittee shall cause all nondomestic users subject to federal categorical standards to achieve compliance no later than the date specified in those requirements or, in the case of a new nondomestic user, upon commencement of the discharge.
3. The Permittee shall perform the pretreatment functions as required in 40 CFR Part 403, including, but not limited to the following:
 - a. Implementation of the necessary legal authorities as provided in 40 CFR Section 403.8(f)(1).
 - b. Enforcement of the pretreatment requirements in Sections 40 CFR 403.5 and 403.6.
 - c. Implementation of the programmatic functions as provided in 40 CFR Section 403.8(f)(2), and
 - d. Providing the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR Section 403.8(f)(3).
4. The Permittee shall submit annually to the DOH and EPA a report describing its pretreatment activities over the previous year. In the event that the Permittee is not in compliance with any conditions or requirements of this permit, then the Permittee shall also include the reasons for noncompliance and state how and when the Permittee shall comply with such conditions and requirements. This annual report shall cover operations from January 1 through December 31, and is due on March 31st of the following year. The report shall contain, but not be limited to, the following information:
 - a. A summary of analytical results from representative, flow proportioned, 24-hour composite sampling of the facility's influent and effluent for those pollutants the EPA has identified under section 307(a) of the CWA which are known or suspected to be discharged by nondomestic users. This will consist of wastewater sampling and analysis in accordance with the minimum frequency of analysis stated in Part A of this permit. The Permittee is not required to sample and analyze for asbestos. Sludge monitoring is covered in Part G of this

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permit. The Permittee shall also provide any influent or effluent monitoring data for non-priority pollutants which the Permittee believes may be causing or contributing to Interference or Pass Through. Sampling and analysis shall be performed with the techniques prescribed in 40 CFR Part 136:

- b. A discussion of Upset, Interference, or Pass Through incidents, if any, at the treatment plant which the Permittee knows or suspects were caused by nondomestic users of the collection system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken and, if known, the name and address of the nondomestic user(s) responsible. The discussion shall also include a review of the applicable pollutant limitations to determine whether any additional limitations, or changes to existing requirements, may be necessary to prevent Interference or Pass Through.
- c. An updated list of the Permittee's significant industrial users (SIUs) including their names and addresses, and a list of deletions, additions and SIU name changes keyed to the previously submitted list. The Permittee shall provide a brief explanation for each change. The list shall identify the SIUs subject to federal categorical standards by specifying which set(s) of standards are applicable to each SIU. The list shall also indicate which SIUs are subject to local limitations.
- d. The Permittee shall characterize the compliance status of each SIU by providing a list or table which includes the following information:
 - (1) Name of the SIU;
 - (2) Category, if subject to federal categorical standards;
 - (3) Type of wastewater treatment or control processes in place;
 - (4) Number of samples taken by the Permittee during the year;
 - (5) Number of samples taken by the SIU during the year;
 - (6) For an SIU subject to discharge requirements for total toxic organics, whether all required certifications were provided;
 - (7) List of the standards violated during the year. Identify whether the violations were for categorical standards or local limits;
 - (8) Whether the facility is in significant noncompliance as defined at 40 CFR 403.8(d)(2)(vii) at any time during the year, and
 - (9) Summary of enforcement or other actions taken during the year to return the SIU to compliance. Describe the type of action, final compliance date, and the amount of fines and penalties collected, if any. Describe any proposed actions for bringing the SIU into compliance.

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- e. A brief description of any programs the Permittee implements to reduce pollutants from nondomestic users that are not classified as SIUs;
 - f. A brief description of any significant changes in operating the pretreatment program which differ from the previous year including, but not limited to, changes concerning the program's administrative structure, local limits, monitoring program or monitoring frequencies, legal authority, enforcement policy, funding levels, or staffing levels;
 - g. A summary of the annual pretreatment budget, including the cost of pretreatment program functions and equipment purchases; and
 - h. A summary of activities to involve and inform the public of the program including a copy of the newspaper notice, if any, required in 40 CFR Section 403.8(f)(2)(vii).
5. The Permittee shall submit semi-annual SIU compliance status reports to the Director of Health and the EPA. The report shall cover the first six months of the calendar year and shall be due on July 31st of the same year. The report shall contain the following:
- a. The name and address of all SIUs which violated any discharge or reporting requirements during the report period;
 - b. A description of the violations including whether any discharge violations were for categorical standards or local limits;
 - c. A description of the enforcement or other actions that were taken to remedy the noncompliance;
 - d. The status of active enforcement and other actions taken in response to SIU noncompliance identified in previous reports; and
 - e. The implementation and compliance status of the BMP-based animal and vegetable oil and grease control program

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I. WASTEWATER POLLUTION PREVENTION PROGRAM

1. Annual Report

By May 31st of each year, the Permittee shall submit an annual report summarizing the critical parameters which impact the operations of the facility to the Director of Health. The report shall include, at a minimum, the evaluation of the following critical parameters:

- a. Flow:
- b. Biochemical oxygen demand loading:
- c. Suspended solids loading:
- d. Toxic pollutants or impacts of septic wastes:
- e. Growth potential of the service area:
- f. Impact of new regulations:
- g. Bypasses and overflows:
- h. Effectiveness and condition of the facility's collection system:
- i. Reported design capacity in permit; and
- j. Treatment capacity based on additional information.

2. Flow Rate Notification

The Permittee shall notify the Director of Health and the Regional Administrator in writing not later than 90 days after the 30-day average dry weather discharge flow rate first equals or exceeds 75% of the actual treatment capacity of the facility as reported above in Part I.1.j. The report shall include:

- a. The date on which the 30-day average discharge flow rate first equals or exceeds 75% of the actual treatment capacity of the facility;
- b. An estimate of when the 30-day average discharge flow rate will equal or exceed the actual treatment capacity of the facility; and

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- c. A schedule of compliance to provide additional treatment capacity before the 30-day average discharge flow rate equals the actual treatment capacity of the facility

3 Implementation of the Schedule of Compliance

- a. The Permittee shall comply with the provisions of the schedule of compliance after approval by the Director of Health.
- b. The Permittee shall initiate contingency plans to provide additional treatment capacity not later than 90 days following the date on which the 30-day average discharge flow rate first equals or exceeds 85% of the actual treatment capacity of the facility as reported in Part I 1 j
- c. Special exemptions to eliminate the requirement for a contingency plan may be granted by the Director of Health. Exemptions from this requirement shall be requested in writing and may be made a part of the annual report. The Director of Health shall notify the Permittee in writing of his decision.

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J. REPORTING REQUIREMENTS

1. Monitoring Results

- a. The Permittee shall summarize and report monitoring results obtained during the previous monitoring period on a Discharge Monitoring Report (DMR) Form (EPA No. 3320-1)
- b. The Permittee shall submit the results of all monitoring required by this permit in such a format as to allow direct comparison with the limitations and requirements of this permit
- c. The Permittee shall have monitoring reports postmarked no later than the 28th day of the month following the completed monitoring period
- d. The Permittee shall submit duplicate signed copies of these, and all other reports required herein, to the Regional Administrator and the Director of Health at the following addresses:

Regional Administrator
Environmental Protection Agency, Region 9
Water Division
CWA Compliance Office (WTR-7)
75 Hawthorne Street
San Francisco, CA 94105

Director of Health
State of Hawaii
Department of Health
Environmental Management Division
Clean Water Branch
919 Ala Moana Boulevard, Room 301
Honolulu, Hawaii 96814-4920

2. Noncompliance and Other Incidents

The following requirements replace the 24-hour notice requirements for bypasses (Standard NPDES Conditions Section 17(d)(2)(B) and 40 CFR Section 122.41(1)(6)(ii)(A)) and upsets (Standard NPDES Conditions Section 18(c)(3) and 40 CFR Section 122.41(1)(6)(ii)(B))

a. Immediate Reporting

- (1) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge to State waters, the Permittee shall orally notify the Department of Health at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.

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- (2) In the event of a bypass, upset, or sewage spill resulting in or contributing to a discharge of 1,000 gallons or more to State waters, the Permittee shall orally notify the Department of Health and the AP news wire services at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.
- (3) In the event of an exceedance of a daily maximum discharge limitation, if any exist, the Permittee shall orally notify the Department of Health at the time the Permittee's authorized personnel becomes aware of the circumstances, but no later than 24 hours after the event.

b Contact for Oral Reports

- (1) The Permittee shall make oral reports during regular office hours (7:45 a.m. to 4:30 p.m.) to the Department of Health, Clean Water Branch at 586-4309.
- (2) The Permittee shall make oral reports outside of regular office hours to the State-On-Scene Coordinator (SOSC) from the Office of Hazard Evaluation and Emergency Response (HEER) at 226-3799, or to the State Hospital Operator at 247-2191.

c Written Submission

- (1) For those noncompliances requiring immediate reporting, the Permittee shall submit a written noncompliance report. The Permittee shall submit the report to the Department of Health, Clean Water Branch at the address listed in Part J.1.d within five working days after the Permittee's authorized personnel becomes aware of the noncompliance.
- (2) The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; public notice efforts, if any; clean-up efforts, if any; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.
- (3) The Director may waive the written report or the five day deadline on a case-by-case basis for spills, bypasses, upsets, and violations of daily maximum discharge limitations if the oral report has been received within 24 hours of the noncompliance or when the Permittee's authorized personnel becomes aware of the noncompliance.

d Other Noncompliance

The Permittee shall report all other instances of noncompliance not reported under Part J.2.a at the time DMRs are submitted as required by Part J.1 of this permit. The noncompliance reports shall contain the information requested in Part J.2.c(2) of this permit.

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3 Other Reporting Requirements

The Permittee shall comply with the reporting requirements of 40 CFR Sections 122.41(1)(1) through 122.41(1)(5), and 122.41(1)(8) as incorporated by Standard NPDES Permit Conditions, Section 16. Parts J.1 and J.2 of this permit supersede the requirements of 40 CFR Sections 122.41(1)(6) and 122.41(1)(7).

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K. SPECIAL REQUIREMENTS

I. Schedule of Submission

a. Monitoring Programs

Within 90 days after the effective date of this permit, the Permittee shall submit the following to the Director of Health:

- (1) Effluent monitoring program detailing the sampling requirements specified in Part A of this permit.
- (2) Whole effluent toxicity monitoring program detailing the requirements specified in Part B of this permit.
- (3) Recreational area monitoring program detailing the sampling requirements specified in Part D of this permit.
- (4) Zone of Mixing monitoring program detailing the sampling requirements specified in Part E of this permit.
- (5) Sludge monitoring program detailing the requirements specified in Part G.2.b of this permit; and
- (6) Process control program detailing the treatment facility monitoring and sampling procedures.

b. Annual Reports

- (1) By February 19th of each year, the Permittee shall submit an annual report on sludge management activities during the previous calendar year to the EPA Regional Sludge Coordinator and the Director of Health as specified in Part G of this permit.
- (2) By March 31st of each year, the Permittee shall submit an annual report on the Permittee's pretreatment activities over the previous calendar year to the Regional Administrator and the Director of Health as specified in Part H of this permit.
- (3) By May 31st of each year, the Permittee shall submit an annual report summarizing the critical parameters which impact the operations of the facility to the Director of Health as specified in Part I of this permit.

c. Semi-Annual Reporting

By July 31st (covering the period beginning on January 1st and ending on June 30th) of each year, the Permittee shall submit a semi-annual SIU compliance status report to the Department of Health and the EPA as outlined in Part H.5 of this permit

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d Other Submittals

- (1) Within 120 days after the effective date of this permit, the Permittee shall submit an initial investigation toxicity reduction evaluation workplan to the Director of Health as specified in Part B.3 a of this permit.
- (2) During the term of this permit, the Permittee shall submit ocean outfall investigation findings to the Director of Health as specified in Part E.4 of this permit; and
- (3) Within 120 days after the effective date of this permit, the Permittee shall submit an initial investigation evaluation plan to the Director of Health as specified in Part F 2 of this permit.

2. Operation and Maintenance

The Permittee shall submit a schedule for approval by the Director of Health at least ten working days prior to any maintenance of facilities which the Permittee determines may result in effluent limitations being exceeded. The schedule shall contain a description of the maintenance and its purpose; the period of maintenance, including exact dates and times; and steps taken or planned to reduce, eliminate, and prevent occurrence of noncompliance.

3. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the Permittee shall either:

provide an alternate power source sufficient to operate the wastewater treatment facilities.

or, if an alternate power source is not available,

halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

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L APPENDIX

Definitions

1. Bypass
Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
2. Composite Sample (24-hour) for Effluent Monitoring
Composite sample means a combination of at least eight sample aliquots, collected at periodic intervals during a 24-hour period. The composite must be flow proportional: either the time interval between each aliquot or the volume of each stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
3. Daily Maximum
The "Daily Maximum" is the "Maximum Daily Concentration" as defined in the Standard NPDES Permit Conditions.
4. Design Capacity
Design capacity is the theoretical capacity of a facility developed without the benefit of operating records.
5. Exceptional Quality Sludge
Sludge that meets the pollutant concentration limits in Tables I and III of 40 CFR Section 503.13; Class A pathogen limits; and one of the vector attraction reduction requirements in 40 CFR Sections 503.33(b)(1) through 503.33(b)(8).
6. Grab Sample
Grab sample means an individual sample collected at a randomly-selected time over a period not exceeding 15 minutes.
7. Geometric Mean
Geometric mean shall be calculated using the results from the current monitoring period and those from the previous monitoring periods such that the total time span of the monitoring periods used for the calculation encompasses one (1) year. The definition of a geometric mean can be found in Standard NPDES Permit Conditions, Section 3 k.
8. 7-day Average
The "7-day Average" is the "Average Weekly Concentration" as defined in the Standard NPDES Permit Conditions.

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9 30-day Average

The "30-day Average" is the "Average Monthly Concentration" as defined in the Standard NPDES Permit Conditions.

10 Treatment Capacity

Treatment capacity is the actual capacity of a facility developed based on the actual operating records.

11 Treatment Facility

Treatment facility is all processes designed to improve the quality of the wastewater which is intended to be discharged as plant effluent.

12 Trunk Sewer

Trunk sewers are large sewers that are used to convey wastewater from main sewers to the treatment facility.

13 Upset

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 preventive maintenance, or careless or improper operation.

14 Waste Stream

Waste stream is wastewater which enters the plant and is intended to be discharged as plant effluent.

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ATTACHMENT A: TCLP PARAMETER LIST

Maximum Concentration of Contaminants
 for the Toxicity Characteristic
 (40 CFR Section 262.24, Table 1)

EPA Hazardous Waste Number	Contaminant	Chemical Abstracts Service Number	Regulatory Level (mg/l)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	54-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7	200.0 ¹
D024	m-Cresol	108-39-4	200.0 ¹
D025	p-Cresol	106-44-5	200.0 ¹
D026	Cresol	---	200.0 ¹
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2	0.13 ²
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its epoxide)	76-44-8	0.008
D032	Hexachlorobenzene	118-74-1	0.13 ²
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2

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EPA Hazardous Waste Number	Contaminant	Chemical Abstracts Service Number	Regulatory Level (mg/l)
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0
D036	Nitrobenzene	98-95-3	2.0
D037	Pentachlorophenol	87-86-5	100.0
D038	Pyridine	110-86-1	5.0 ²
D010	Selenium	7782-49-2	1.0
D011	Silver	7440-22-4	5.0
D039	Tetrachloroethylene	127-18-4	0.7
D015	Toxaphene	8001-35-2	0.5
D040	Trichloroethylene	79-01-6	0.5
D041	2,4,5-Trichlorophenol	95-95-4	400.0
D042	2,4,6-Trichlorophenol	88-06-2	2.0
D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl Chloride	75-01-4	0.2

If o-, m- and p-Cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200 mg/l.

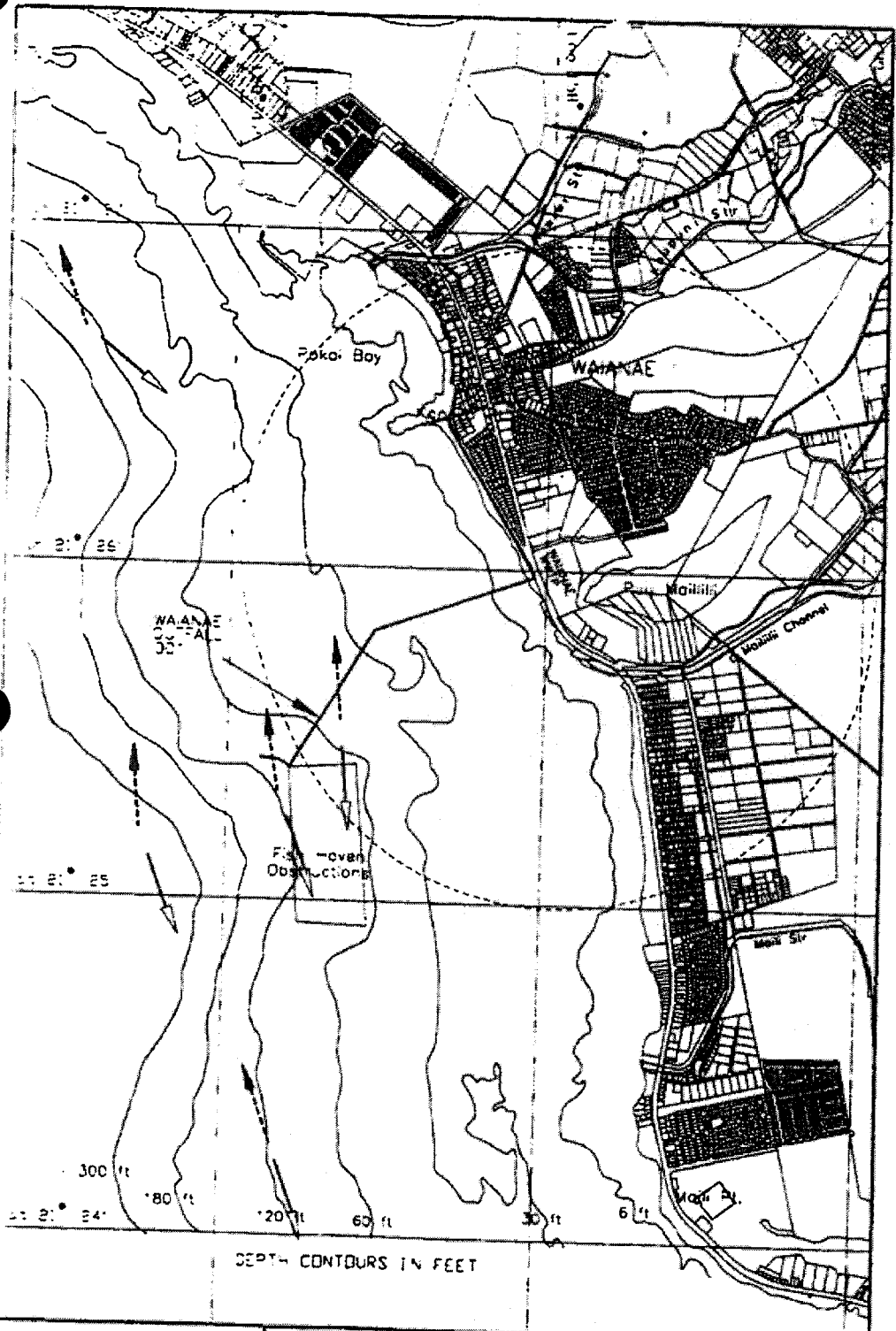
Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

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ATTACHMENT B: PRIORITY POLLUTANTS

<u>Metals</u>	<u>Base/Neutral Extractables</u>	Pyrene
Antimony	Acenaphthene	TCDF
Arsenic	Benzidine	
Beryllium	1,2,4-Trichlorobenzene	
Cadmium	Hexachlorobenzene	<u>Acid Extractables</u>
Chromium	Hexachloroethane	2,4,6-Trichlorophenol
Copper	Bis(2-Chloroethyl) Ether	P-Chloro-M-Cresol
Lead	2-Chloronaphthalene	2-Chlorophenol
Mercury	1,2-Dichlorobenzene	2,4-Dichlorophenol
Nickel	1,3-Dichlorobenzene	2,4-Dimethylphenol
Selenium	1,4-Dichlorobenzene	2-Nitrophenol
Silver	3,3-Dichlorobenzidine	4-Nitrophenol
Thallium	2,4-Dinitrotoluene	2,4-Dinitrophenol
Zinc	2,6-Dinitrotoluene	4,6-Dinitro-O-Cresol
	1,2-Diphenylhydrazine	Pentachlorophenol
<u>Other</u>	Fluoranthene	Phenol
Cyanide	4-Chlorophenyl Phenyl Ether	
Asbestos	4-Bromophenyl Phenyl Ether	<u>Volatile Organics</u>
	Bis(2-Chloroisopropyl) Ether	Acrolein
<u>Pesticides</u>	Bis(2-Chloroethoxy)Methane	Acrylonitrile
Aldrin	Hexachlorobutadiene	Benzene
Dieldrin	Hexachlorocyclopentadiene	Carbon Tetrachloride
Chlordane	Isophorone	Chlorobenzene
4,4-DDT	Naphthalene	1,2-Dichloroethane
4,4-DDE	Nitrobenzene	1,1,1-Trichloroethane
4,4-DDD	N-Nitrosodimethylamine	1,1-Dichloroethane
Alpha-Endosulfan	N-Nitrosodiphenylamine	1,1,2-Trichloroethane
Beta-Endosulfan	N-Nitrosodi-N-Propylamine	1,1,2,2-Tetrachloroethane
Endosulfan Sulfate	Bis(2-Ethylhexyl)Phthalate	Chloroethane
Endrin	N-Butyl Benzyl Phthalate	2-Chloroethyl Vinyl Ether
Endrin Aldehyde	Di-N-Butyl Phthalate	Chloroform
Heptachlor	Di-N-Octyl Phthalate	1,1-Dichloroethylene
Heptachlor Epoxide	Diethyl Phthalate	1,2-Trans-Dichloroethylene
Alpha-BHC	Dimethyl Phthalate	1,2-Dichloropropane
Beta-BHC	1,2-Benzanthracene	1,3-Dichloropropene
Gamma-BHC(Lindane)	3,4-Benzo-Pyrene	Ethylbenzene
Delta-BHC	3,4-Benzofluoranthene	Methylene Chloride
PCB 1016	1,1,12-Benzofluoranthene	Methyl Chloride
PCB 1221	Chrysene	Methyl Bromide
PCB 1232	Acenaphthylene	Bromoform
PCB 1242	Anthracene	Bromodichloromethane
PCB 1248	1,12-Benzoperylene	Dibromochloromethane
PCB 1254	Fluorene	Tetrachloroethylene
PCB 1260	Phenanthrene	Toluene
Toxaphene	1,2,5,6-Dibenzanthracene	Trichloroethylene
	Indeno(1,2,3-CD)Pyrene	Vinyl Chloride

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DEPTH CONTOURS IN FEET



SCALE 1:24000
 2000' 4000'

Division of Water Quality
 Department of Wastewater Management
 City and County of Honolulu

Location Map
 Waianae WWTP

LEGEND
 ———> FLOOD
 - - - -> EBB
 ······ 1 MILE BOUNDARY

FINAL PERMIT ISSUANCE
 DATED: SEPTEMBER 20, 1999

Source: USGS 1:25000 Data, March 20, 1982
 City and County of Honolulu

Kailua 1999

PERMIT NO. HI 0021296

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") and Chapter 342D, Hawaii Revised Statutes, and Chapters 11-54 and 11-55, Administrative Rules, Department of Health, State of Hawaii,

CITY AND COUNTY OF HONOLULU
DEPARTMENT OF ENVIRONMENTAL SERVICES

(hereinafter "PERMITTEE"),

is authorized to discharge secondary treated wastewater,

to the receiving waters named the Pacific Ocean through Outfall Serial No. 001 at Latitude 21°27'32"N, Longitude 157°42'56"W,

and storm water runoff associated with industrial activity,

to the receiving waters named the Nuupia Pond through Outfall Serial No. 002, at Latitude 21°25'50.3"N, Longitude 157°45'26.5"W,

from its Kailua Regional Wastewater Treatment Plant (hereinafter "FACILITY"),

located at 595 Kaneohe Bay Drive, Kailua, Oahu, Hawaii,

in accordance with the effluent limitations, monitoring requirements and other conditions set forth herein, and in the permit attachments, including the Department of Health "Standard NPDES Permit Conditions," dated May 3, 1999.

All references to Title 40 of the Code of Federal Regulations (40 CFR) are to regulations that are in effect on July 1, 1998, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in 40 CFR.

This permit will become effective December 17, 1999.

This permit and the authorization to discharge will expire at midnight, June 30, 2004.

Signed this 17th day of November, 1999


(For) Director of Health

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DATED: NOVEMBER 17, 1999

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NPDES STANDARD PERMIT CONDITIONS (Updated as of May 3, 1999)

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (based upon a design treatment capacity of 15.25 million gallons per day)

1. Limitations and Monitoring Requirements

During the period beginning with the effective date of this permit and lasting through **June 30, 2004**, the Permittee is authorized to discharge secondary-treated wastewater from Outfall Serial No. 001. The discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	DISCHARGE LIMITATION		UNIT	MONITORING FREQUENCY	TYPE OF MONITORING
Flow ¹	N/L		MGD	Continuous	Recorder or Totalizer
Biochemical Oxygen Demand (5-day) ¹	30-day Average	30	mg/l	5 Days/Week ⁴	24-Hour Composite
		1442 ²	kg/day		
		85 ³	% Removal		
	7-day Average	45	mg/l		
		2163 ²	kg/day		
Total Suspended Solids ¹	30-day Average	30	mg/l	5 Days/Week ⁴	24-Hour Composite
		1442 ²	kg/day		
		85 ³	% Removal		
	7-day Average	45	mg/l		
		2163 ²	kg/day		
pH Range	6.0 - 9.0 ⁵		Standard Unit	5 Days/Week ⁴	Grab
Total Nitrogen	N/L		mg/l	Once/Month ⁶	24-Hour Composite
Ammonia Nitrogen	N/L		mg/l	Once/Month ⁶	24-Hour Composite
Nitrate + Nitrite Nitrogen	N/L		mg/l	Once/Month ⁶	24-Hour Composite
Total Phosphorus	N/L		mg/l	Once/Month ⁶	24-Hour Composite
Turbidity	N/L		N.T.U.	Once/Month ⁶	24-Hour Composite
Whole Effluent Toxicity ⁷	Chronic	186 ⁸	TU _c	Once/Month ⁶	24-Hour Composite
	Acute	18.6 ⁸	TU _a		

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PARAMETER	DISCHARGE LIMITATION	UNIT	MINIMUM MONITORING FREQUENCY	SAMPLE TYPE
Enterococci	N/L	#/100 ml	Once/Month ⁹	Grab
Priority Pollutants ¹⁰	N/L	µg/l	Once/Year ¹¹	24-Hour Composite/ Grab ¹²

N/L No limitation at this time. Monitoring and reporting required only.
 MGD Million Gallons Per Day
 mg/l Milligrams Per Liter
 µg/l Micrograms Per Liter
 kg/day Kilograms Per Day
 ml Milliliters
 N.T.U. Nephelometric Turbidity Units
 TU_c Chronic Toxicity Units
 TU_a Acute Toxicity Units

- 1 The Permittee shall monitor both the influent and effluent.
- 2 The mass emission rates are based on a discharge flow of 12.7 MGD.
- 3 The 30-day average percent removal shall not be less than 85%.
- 4 The Permittee shall sample each day of the week (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday) at least once every two months.
- 5 The Permittee shall maintain the pH of the effluent within the limits of 6.0 and 9.0 unless the Permittee demonstrates that: (1) inorganic chemicals are not added to the waste stream as part of the treatment process; and (2) contributions from the industrial sources do not cause the effluent discharge to be less than 6.0 or greater than 9.0.
- 6 "Once/Month" shall mean once per calendar month.
- 7 The Permittee shall conduct whole effluent toxicity monitoring in accordance with the provisions in Part B of this permit.
- 8 Limitation does not apply to monitoring results using *trypanneustes gratilla*.
- 9 If the limitation in Part D.1.a is exceeded, then the Permittee shall increase monitoring to five days per month, where samples shall be equally spaced at six day intervals or unequally spaced at five, six, seven, or eight day intervals, provided that the total period covered is between 25 and 30 days. The Permittee shall not collect consecutive samples on the same day of the week. The Permittee shall continue this sampling frequency until the conditions in Part D.1.b are met.
- 10 Priority pollutants are listed under the Act Section 307(a) and in Attachment B of this permit. The priority pollutant scan shall exclude asbestos. Detection levels shall be reported and shall meet the requirements of 40 CFR Part 136.

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- " "Once/Year" shall mean once per calendar year.
- " "The Permittee shall analyze for cyanide and the volatile fraction of the toxic organic compounds with a grab sample. The Permittee shall analyze all other pollutants with composite sample.

2. Sampling Locations

- a. The Permittee shall take all influent samples downstream of any additions to the trunk sewer, upstream of any in-plant return flows, and prior to treatment.
- b. The Permittee shall take all effluent samples downstream from any additions to the treatment plant and any in-plant return flows or disinfection units, and prior to mixing with the receiving waters.
- c. The Permittee shall not change sampling locations without the notification to and the approval from the Director of Health.

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B. **WHOLE EFFLUENT TOXICITY LIMITATIONS AND MONITORING REQUIREMENTS**

1. **Chronic Toxicity Limitation and Monitoring Requirements**

The Permittee shall conduct monthly chronic toxicity tests on flow-weighted 24-hour composite effluent samples in accordance with the procedures outlined below.

a. **Limitation**

The chronic toxicity discharge limitation is specified in Part A.1 of this permit and does not apply to monitoring results for toxicity tests using *trypneustes gratilla*. However, if the chronic toxicity for *trypneustes gratilla* exceeds 186 then the Permittee shall initiate a Toxicity Reduction Evaluation (TRE) in accordance with Part B.3.

b. **Test Species and Methods**

The Permittee shall conduct chronic toxicity testing on the following species using the methods specified:

- (1) *Ceriodaphnia dubia* using Short-Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms (EPA 600/4-91/002, July 1994;
- (2) *Trypneustes gratilla* using Hawaiian Collector Urchin, Trypneustes Gratilla (Hawa'e) Fertilization Test Method (Adapted by Amy Wagner, EPA Region 9 Laboratory, Richmond, CA from a method developed by George Morrison, EPA, ORD Narragansett, RI and Diane Nacci, Science Applications International Corporation, ORD Narragansett, RI).

If the Permittee uses static tests, the daily renewal solutions shall be fresh 24-hour composite samples, unless samples are shipped off-island to a contract laboratory in which case one 24-hour composite sample may be used for all renewals. The Permittee may switch between species of sea urchin without the prior approval from the Director of Health.

c. **Quality Assurance**

The Permittee shall test series of five dilutions and a control. The series shall include the instream waste concentration (IWC), two dilutions below the IWC, and two dilutions above the IWC. The chronic IWC for this discharge shall be 0.85 percent effluent.

d. Exceptions

- (1) If the Permittee experiences difficulty in obtaining gametes or has unacceptable control performance while conducting the sea urchin sperm/fertilization bioassay during a monitoring period, the Permittee shall document its efforts, communicate all attempts to the Director of Health, and report all attempts on the discharge monitoring report for that monitoring period.
- (2) It shall not be a violation of this permit if it can be proven to the Director of Health's satisfaction that the inability to perform the tests as described above was due to circumstances beyond the Permittee's control.
- (3) If the Permittee demonstrates that the chronic toxicity tests cannot be performed reliably, the Permittee may petition the Director of Health to perform acute toxicity tests in lieu of the chronic tests specified above. The acute toxicity tests shall be in accordance with the methods identified in Part B.2 below.

2. Alternate Monitoring (Acute Toxicity Testing)

Beginning 30 days after written approval from the Director of Health to perform acute toxicity tests, the Permittee shall conduct, or have a contract laboratory conduct, monthly static or flow-through acute bioassays on composite effluent samples.

a. Limitation

The acute toxicity discharge limitation is specified in Part A.1 of this permit and becomes effective for the most sensitive species one (1) year after the commencement of acute toxicity tests.

b. Testing Procedures

- (1) The Permittee shall conduct the acute toxicity testing in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms (EPA 600/4-90/027F, August 1993.)
- (2) If necessary, the Permittee may adjust the salinity of a discharge using salts to allow testing with marine species.
- (3) The Permittee shall conduct tests in 8.5 percent effluent for a period of