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

CITY AND COUNTY OF HONOLULU
DEPARTMENT OF ENVIRONMENTAL SERVICES

(hereinafter PERMITTEE),

is authorized to discharge treated wastewater to the receiving waters named Pacific Ocean through Outfall Serial No. 001 at Latitude 21°27′32"N and Longitude 157°42′56"W,

from its Kailua Regional Wastewater Treatment Plant located at 95 Kaneohe Bay Drive, Kailua, Hawaii 96734

in accordance with the effluent limitations, monitoring requirements and other conditions set forth herein, and in the DOH "Standard NPDES Permit Conditions", that is available on the DOH, Clean Water Branch (CWB) website at: http://health.hawaii.gov/cwb/files/2013/05/StandardNpdesPermitConditions.pdf.

All references to Title 40 of the Code of Federal Regulations (CFR) are to regulations that are in effect on July 1, 2013, except as otherwise specified. Unless otherwise specified herein, all terms are defined as provided in the applicable regulations in Title 40 of the CFR.

This permit, including the Zone of Mixing, will become effective **<DATE>.**

This permit, including the Zone of Mixing, and the authorization to discharge will expire at midnight, **<DATE>.**

Signed this **<DATE>.**

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(For) Director of Health

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A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized to discharge treated wastewater from Outfall Serial No. 001. The discharge shall be limited and monitored as specified below.

Effluent Characteristics	Discharge Limitations[1]				Monitoring Requirements	
	Average Annual	Average Monthly	Maximum Daily	Units	Measurement Frequency	Sample Type
Flow	[2]	[2]	[2]	MGD	Continuous/ Estimate[4]	--
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	30	45	[2]	mg/L	5/Week[4]	24-Hour Composite
	3,178	4,766	[2]	lbs/day		
	The average monthly percent removal shall not be less than 85 percent					
Total Suspended Solids (TSS)	30	45	[2]	mg/L	5/Week[4]	24-Hour Composite
	3,178	4,766	[2]	lbs/day		
	The average monthly percent removal shall not be less than 85 percent					
pH	Not less than 6.0 and not greater than 9.0			s.u.	5/Week	Grab
Oil and Grease	--	--	[9]	mg/L	1/Month[4]	Grab
	--	--	[9]	lbs/day		
Chronic Toxicity	--	--	Pass[3]	TUc	1/Month	24-Hour Composite
Chlordane	0.030	--	0.74	µg/L	1/Month[4]	24-Hour Composite
	0.0038	--	0.094	lbs/day		
Dieldrin	0.0047	--	0.35	µg/L	1/Month[4]	24-Hour Composite
	0.00060	--	0.045	lbs/day		
Enterococci	--	6,510[5]	93,186[6]	CFU/100 mL	5/Month[7]	Grab[8]
Temperature	--	--	[9]	°C	1/Week	Grab
Total Nitrogen	--	--	[9,10]	mg/L	1/Month	24-Hour Composite
	--	--	[9,10]	lbs/day		
Total Phosphorus	--	--	[9,10]	mg/L	1/Month	24-Hour Composite
	--	--	[9,10]	lbs/day		
Turbidity	--	--	[9,10]	NTU	1/Month	Grab
Remaining Pollutants[11]	--	--	[9]	µg/l	1/Year	Grab

MGD – Million Gallons per Day
N/A – Not Applicable

[1] Compliance with mass-based effluent limitations shall be determined using the following formula:
lbs/day = 8.34 * concentration (mg/L) * flow (MGD)

[2] The Permittee shall monitor and report the parameter results.

[3] "Pass", as described in Section B.3 of this Permit.

[4] Both influent and effluent samples shall be taken, as specified in Parts A.2 and A.3 of this Permit.
[5] Compliance based on the monthly geometric mean.
[6] Compliance based on the single sample maximum.
[7] Report enterococci as a geometric mean and as a single sample.
[8] Enterococci samples shall be analyzed using Method 1600, *Membrane Filter Test Method for Enterococci in Water* (EPA 821-R-09-016, December, 2009).
[9] The Permittee shall monitor and report the parameter analytical test results.
[10] Both influent and effluent samples shall be taken as specified in Part A.4 of this Permit.
[11] The Permittee shall perform annual monitoring, based on a calendar year, on all remaining pollutants listed in Appendix 1 of this permit, except those already specified in the table above. The use of grab samples may be used, although 24-hour composite samples may be used if indicated in Appendix 1.

Parameter	Effluent Limitations			Monitoring Requirements	
	Geometric Mean[1]	Single Sample Maximum	Units	Measurement Frequency	Sample Type
Ammonia Nitrogen	--	10800	µg/L	1/Month[2]	24-Hour Composite
	--	1,374	lbs/day[3]		
Nitrate + Nitrite Nitrogen	--	15,000	µg/L	1/Month[2]	24-Hour Composite
	--	1,908	lbs/day[3]		

[1] To be evaluated on a calendar year.
[2] Both influent and effluent samples shall be taken, as specified in Parts A.2 and A.4 of this Permit.
[3] Compliance with mass-based effluent limitations shall be determined using the following formula:
lbs/day = 8.34 * concentration (mg/L) * flow (MGD)

2. For individual discharge parameters monitored in the influent and effluent, monitoring shall be conducted on the same day.

3. All influent and effluent monitoring shall be arranged so that each day of the calendar week is represented once per month (i.e., for discharge parameters monitoring five (5) calendar days per week or three (3) calendar days per week), or once per two (2) months (i.e., for discharge parameters monitored once per week).

4. Effluent monitoring for total nitrogen, total phosphorus, ammonia nitrogen, nitrate plus nitrite nitrogen, and turbidity shall be conducted on the same day that receiving water monitoring for said pollutants is conducted.

5. Samples taken in compliance with the monitoring requirements in Part A of this permit shall be taken at the following locations:

   a. Influent Monitoring, Monitoring Location INF: All influent samples shall be taken downstream of any additions to the trunk sewer, upstream of any in-plant return flows, and prior to treatment where representative samples of the influent can be obtained.

b. Effluent Monitoring Location, Outfall Serial No. 001: All effluent samples shall be taken downstream from any additions to the facility after all treatment processes, and prior to mixing with effluent from the Marine Corps Base Hawaii Kaneohe Bay Water Reclamation Facility and the receiving waters, where representative samples of the final effluent can be obtained.

B. WHOLE-EFFLUENT TOXICITY REQUIREMENTS

1. Monitoring Frequency

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

For whole effluent toxicity tests using *Tripneustes gratilla*, 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, and report all attempts on the DMR for that monitoring period.

~~It shall not be considered a non-compliance of the whole effluent toxicity requirements if it can be proven to the Director's satisfaction that the inability in obtaining gametes for testing was due to circumstances beyond the Permittee's control.~~

2. Test Species and Methods

The Permittee shall conduct chronic toxicity testing on *T. gratilla* using Hawaiian Collector Urchin, *Tripneustes 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) (EPA/600/R-12/022) and follow Quality Assurance procedures as described in the test methods manual Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995).

3. Chronic WET Permit Limit

All State waters shall be free from chronic toxicity as measured using the toxicity tests listed in HAR, Section 11-54-10, or other methods specified by the Director. For this discharge, the determination of "Pass" or "Fail" from a single-effluent concentration chronic toxicity test at the applicable IWC using the Test of Significant Toxicity (TST) approach described in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010). For any one chronic toxicity test, the chronic WET permit limit that must be met is rejection of the null hypothesis (Ho):

IWC (0.54 percent effluent) mean response ≤ 0.75 × Control mean response.

a. For Outfall Serial No. 001, an IWC of 0.54% shall be used.

A test result that rejects this null hypothesis is reported as “Pass” on the DMR form. A test result that does not reject this null hypothesis is reported as “Fail” on the DMR form. To calculate either “Pass” or “Fail”, the permittee shall follow the instructions in National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, Appendix A. If a test result is reported as “Fail”, then the permittee shall follow Part B.6 (Accelerated Toxicity Testing and TRE/TIE Process) of this permit.

4. Quality Assurance

a. Quality assurance measures, instructions, and other recommendations and requirements are found in the chronic test methods manual previously referenced. Additional requirements are specified below.

b. This discharge is subject to a determination of “Pass” or “Fail” from a single-effluent concentration chronic toxicity test at the IWC (for statistical flowchart and procedures, see National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document, Appendix A, Figure A-1). During Step 6 of Appendix A, the Permittee shall use an alpha value of 0.05 for *T. gratilla*. The chronic IWC for Outfall Serial No. 001 is 0.54 percent effluent.

c. Effluent dilution water and control water shall be ~~receiving water or~~ lab water, as described in the test methods manual Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136, 1995). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used.

d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

e. All multi-concentration reference toxicant test results must be reviewed and reported according to EPA guidance on the evaluation of concentration-response relationships found in Method Guidance and

Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136) (EPA/821/B-00/004, 2000).

f. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the Permittee shall re sample and re test within 14 calendar days.

g. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the Director.

5. Initial Investigation TRE Work Plan

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

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

b. A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the facility.

c. An indication of who would conduct the TIEs if a Toxicity Identification Evaluation (TIE) is necessary (i.e., an in-house expert or outside contractor).

d. A flow chart of the workplan steps.

6. Accelerated Toxicity Testing and TRE/TIE Process

a. If the chronic WET permit limitation is exceeded and the source of toxicity is known (e.g., a temporary plant upset), then the Permittee shall conduct one additional toxicity test using the same species and test method. This toxicity test shall begin within 14 calendar days of receipt of a test result exceeding the chronic WET permit limit. If the additional toxicity test does not exceed the chronic WET permit limitation, then the Permittee may return to the regular testing frequency.

b. If the chronic WET permit limit is exceeded and the source of toxicity is not known, then the Permittee shall conduct six (6) additional toxicity tests using the same species and test method, approximately every two (2) weeks, over a 12 week period. This testing shall begin within 14 calendar days of receipt of a test result exceeding the chronic WET permit limit. If none of the additional toxicity tests exceed the chronic WET permit limit, then the Permittee may return to the regular testing frequency.

c. If one (1) of the additional toxicity tests (in paragraphs Parts B.6.a or B.6.b) exceeds the chronic WET permit limitation, then, within 14 calendar days of receipt of this test result, the Permittee shall initiate a TRE using, according to the type of treatment facility, EPA manual Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants (EPA/833/B-99/002, 1999) or EPA manual Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070, 1989). In conjunction, the Permittee shall develop and implement a Detailed TRE Work Plan which shall include the following: further actions undertaken by the Permittee to investigate, identify, and correct the causes of toxicity; actions the Permittee will take to mitigate the effects of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

d. The Permittee may initiate a TIE as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA manuals: Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003, 1991); Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/081, 1993); and Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document (EPA/600/R-96-054, 1996). Further, the Permittee may be required by the Director to initiate a TIE as part of a TRE.

e. Prior to conducting a TIE, the Permittee shall submit a TIE plan to the Director. The TIE plan, at a minimum shall:

(1) Discuss previous TIE efforts and other available data useful in developing TIE procedures

(2) Evaluate available operations and effluent data

(3) Identify and discuss site-specific considerations for the TIE effort

(4) Include a comprehensive quality control program

(5) Establish a monitoring program

(6) Identify test methods and statistical methods to be used for the TIE effort

(7) Identify the TIE procedures for the baseline toxicity tests and TIE manipulations

(8) Discuss additional potential analysis that might be helpful in evaluating the causative toxicant(s) or appropriate treatability, such as pollutant scans for toxic effluent

(9) Discuss the personnel and their qualifications for the team conducting the TIE results interpretation

(10) Include follow-up procedures for use if the TIE is inconclusive.

The Permittee shall incorporate all comments received from the Director within 14 days of the TIE plan submittal. Within 14 days of the TIE plan submittal, the Permittee shall commence with the TIE.

7. Reporting of Chronic Toxicity Monitoring Results

a. The Permittee shall report on the DMR for the month in which the toxicity test was conducted: “Pass” or “Fail” (based on the Welch’s t-test result), the calculated “percent mean response at IWC”, where:

percent mean response at IWC = ((Control mean response – IWC mean response) ÷ Control mean response)) × 100,

and to assist in evaluation of the test result, the standard deviations for the IWC mean response and the Control mean response.

b. The Permittee shall submit a full laboratory report for all toxicity testing as an attachment to the DMR for the month in which the toxicity test was conducted. The laboratory report shall contain: the toxicity test results;

the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

c. The Permittee shall notify the Director in writing within five (5) calendar days of exceedance of the chronic WET permit limitation. This notification shall describe actions the permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reason(s) that no action has been taken.

8. Permit Reopener for Chronic Toxicity

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

C. WATER QUALITY CRITERIA

1. Specific Water Quality Criteria for Recreational Waters

   a. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated in marine recreational water:

      (1) Within 300 meters (1,000 feet) of the shoreline, including natural public bathing or wading areas, enterococci content shall not exceed a geometric mean of 35 CFU per 100 milliliters in not less than five (5) samples which shall be equally spaced to cover a period between 25 and 30 calendar days. No single sample shall exceed the single sample maximum of 104 CFU per 100 milliliters or the site-specific one-sided 75 percent confidence level. Marine recreational waters along sections of the coastline where enterococci content does not exceed the standard, as shown by the geometric mean test described above, shall not be lowered in quality.

      (2) At locations where sampling is less frequent than five samples per 25 to 30 calendar days, no single sample shall exceed the single sample maximum nor shall the geometric mean of these samples taken during the 30 calendar day period exceed 35 CFU per 100 milliliters.

      (3) Raw or inadequately treated sewage, sewage for which the degree of treatment is unknown, or other pollutants of public health significance, as determined by the Director, shall not be present in natural public swimming, bathing, or wading areas. Warning signs shall be posted where human sewage has been identified as temporarily contributing to the enterococcus count.

   b. Compliance with the water quality criteria listed in Part C.1, above, shall be measured at shoreline monitoring stations as described in Part E of this permit.

2. Basic Water Quality Criteria Applicable to All Waters:

   a. The discharge shall comply with applicable water quality standards for receiving waters adopted by the DOH under HAR, Chapter 11-54, Water Quality Standards, effective October 21, 2012.

   b. The discharge shall not interfere with the attainment or maintenance of that water quality which assures protection of public water supplies and the

protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife and allows recreational activities in and on the water.

c. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated:

(1) All State waters shall be free from pollutants in concentrations which exceed the acute standards listed in HAR 11-54-4(b)(3). All State waters shall also be free from acute toxicity as measured using the toxicity tests listed in HAR 11-54-11, or other methods specified by the Director.

(2) All State waters shall be free from pollutants in concentrations which on average during any 24 hour period exceed the chronic standards listed in HAR 11-54(b)(3). All State waters shall also be free from chronic toxicity as measured using the toxicity tests listed in HAR 11-54-10, or other methods specified by the Director.

(3) All State waters shall be free from pollutants in concentrations which, on average during any 30-day period, exceed the “fish consumption” standards for non-carcinogens in HAR 11-54-4(b)(3). All State waters shall also be free from pollutants in concentrations, which on average during any 12-month period, exceed the “fish consumption” standards for pollutants identified as carcinogens in HAR 11-54-4-(b)(3).

(4) All waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, include:

i. Material that will settle to form objectionable sludge or bottom deposits;

ii. Floating debris, oil, grease, scum, or other floating materials;

iii. Substances in amounts sufficient to produce taste in the water or detectable off-flavor in the flesh of fish, or in amounts sufficient to produce objectionable color, turbidity or other conditions in the receiving waters;

iv. High or low temperatures; biocides; pathogenic organisms; toxic, radioactive, corrosive, or other deleterious substances at levels or in combinations sufficient to be toxic or harmful to human, animal, plant, or aquatic life, or in amounts sufficient to interfere with any beneficial use of the water;

v. Substances or conditions or combinations thereof in concentrations which produce undesirable aquatic life; and

vi. Soil particles resulting from erosion on land involved in earthwork, such as the construction of public works; highways; subdivisions; recreational, commercial, or industrial developments; or the cultivation and management of agricultural lands.

D. ZONE OF MIXING LIMITATIONS

1. Zone of Mixing (ZOM)

The ZOM shall be established for the assimilation of secondary treated wastewater at a design flow of 15.25 MGD. The ZOM shall consist of a rectangular prism having a length of 1,960 feet and a width of 1,000 feet. The diffuser is centered on the longitudinal axis of the ZOM. The discharge of treated wastewater through Outfall Serial No. 001 shall not cause the following water quality criteria to be violated in Class A dry open coastal waters beyond the ZOM:

Parameter	Units	Geometric mean not to exceed the given value[1]	Not to exceed the given value more than 10% of the time[1]	Not to exceed the given value more than 2% of the time[1]
Total Nitrogen	µg/L	110.00	180.00	250.00
Ammonia Nitrogen	µg/L	2.00	5.00	9.00
Nitrate Plus Nitrite Nitrogen	µg/L	3.50	10.00	20.00
Total Phosphorus	µg/L	16.00	30.00	45.00
Chlorophyll a	µg/L	0.15	0.50	1.00
Turbidity	NTU	0.20	0.50	1.00
pH	s.u.	Shall not deviate more than 0.5 units from a value of 8.1, except coastal locations where and when freshwater from stream, storm drain, or groundwater discharge may depress the pH to a minimum level of 7.0.		
Temperature	°C	Shall not vary more than one degree Celsius from ambient conditions.		
Dissolved Oxygen	% Saturation	Not less than 75 percent saturation.		
Salinity	ppt	Shall not vary more than 10 percent from natural or seasonal changes considering hydrologic input and oceanographic factors.		

[1] To be evaluated on an annual basis.

The specific water quality criteria set forth in the table above may be exceeded within the boundaries of the ZOM and shall not constitute a violation of this permit. Compliance with the geometric mean shall be evaluated based on a calendar year.

E. RECEIVING WATER MONITORING PROGRAM REQUIREMENTS

The Permittee shall conduct receiving water monitoring at shoreline, nearshore, and offshore stations, as described below. Results may be used to evaluate compliance with water quality standards specified in Part D of this permit.

1. Shoreline Water Quality Monitoring

Shoreline monitoring for enterococci is used to determine compliance with water quality criteria specific for marine recreational waters described in Part C of this permit.

The Permittee shall monitor at the following stations:

Station	Location	Latitude	Longitude
MS1	Fort Hase Beach	21° 26' 40.0" N	157° 44' 10.6" W
MS2	Kapoho Point	21° 25' 30.8" N	157° 44' 24.2" W
MS3	Kailua Beach	21° 23' 54.8" N	157° 43' 38.2" W
MS4	Lanikai Boat Ramp	21° 23' 44.8" N	157° 43' 19.7" W
Kalama Beach	Kalama Beach	21° 24' 20.1" N	157° 44' 19.9" W
North Beach	North Beach	21° 27' 14.4" N	157° 44' 24.0" W
Oneawa Beach	Oneawa Beach	21° 25' 06.0" N	157° 44' 39.3" W

The following water quality parameters shall be sampled:

Parameter	Units	Sample Type	Monitoring Frequency
Enterococci	CFU/100 mL	Surface Grab	5/Month[1]
Visual Observations	--	Visual	5/Month[1,2]

[1] Samples shall be as equally spaced as possible throughout the calendar month.
[2] Wind direction and speed, weather, and sea condition shall be recorded for each day of sampling. At each station, unusual color, turbidity, odor, or other physical evidence of sewage shall be noted on the log sheet.

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

Monitoring results shall be reported in the monthly DMRs. The DMRs submitted shall include monitoring results and probable sources and an explanation of any exceedances.

2. Nearshore Water Quality Monitoring

Nearshore water quality monitoring data are used to determine compliance with water quality criteria specific for marine recreational waters described in Part C of this permit. Sampling of nearshore stations shall be coordinated with shoreline sampling.

The Permittee shall establish at least four near shore sampling stations within 300 meters of the shoreline.

The following water quality parameters shall be sampled:

Parameter	Units	Sample Type	Monitoring Frequency
Enterococci	CFU/100 mL	Grab	5/Month[1]
Visual Observations	--	Visual	5/Month[1,2]

[1] Samples shall be as equally spaced as possible throughout the calendar month.

[2] Wind direction and speed, weather, and sea condition shall be recorded for each day of sampling. At each station, unusual color, turbidity, odor, or other physical evidence of sewage shall be noted on the log sheet.

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

Monitoring results shall be reported in monthly DMRs. The DMRs submitted shall include monitoring results and probable sources and an explanation of any exceedances.

3. Offshore Water Quality Monitoring

Offshore water quality monitoring data are used to determine compliance with State water quality standards. Offshore stations shall be located using a global positioning device that allows reoccupation of the station within ±6 meters.

The Permittee shall monitor at the following stations:

Station	Latitude	Longitude
M1 (Control Station)	21° 28' 13.4" N	157° 43' 55.9" W
M2	21° 27' 18.4" N	157° 42' 54.9" W
M3	21° 27' 17.0" N	157° 42' 44.1" W
M4	21° 27' 03.3" N	157° 42' 54.7" W

Station	Latitude	Longitude
M5	21° 27' 08.7" N	157° 43' 06.2" W
M6 (Control Station)	21° 26' 35.6" N	157° 42' 55.1" W

The following water quality parameters shall be sampled:

Parameter	Units	Sample Type	Monitoring Frequency
Total Nitrogen	µg/L	Grab[1]	1/Quarter
Ammonia Nitrogen	µg/L	Grab[1]	1/Quarter
Nitrate + Nitrite Nitrogen	µg/L	Grab[1]	1/Quarter
Total Phosphorus	µg/L	Grab[1]	1/Quarter
Chlorophyll a	µg/L	Grab[1]	1/Quarter
Turbidity	NTU	Grab[1]	1/Quarter
pH	s.u.	CDP[2]	1/Quarter
Dissolved Oxygen	mg/L	CDP[2]	1/Quarter
Temperature	°C	CDP[2]	1/Quarter
Salinity	ppt	CDP[2]	1/Quarter

[1] Grab samples shall be collected at each station at 1 meter below the surface, mid-depth, and 2 meters above the bottom.

[1] A continuous depth profile (CDP) is a plot of depth vs. a water quality parameter. Parameter shall be measured on a CDP basis, from 1 meter below the surface to 2 meter above the bottom of the bottom at 2 meter intervals.

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

Monitoring results shall be reported in monthly DMRs. The DMRs submitted shall include monitoring results and probable sources and an explanation of any exceedances.

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. The outfall inspection shall include, but not be limited to, an investigation of the structural integrity, operational status, and maintenance needs. The Permittee shall include findings of the inspection to the Director in the annual wastewater pollution prevention report in Part F of this permit for the year the outfall inspection is conducted.

5. ZOM Dilution Analysis Study

a. Within three (3) years of the effective date of this permit, the Permittee shall conduct and submit to DOH a dilution analysis study which identifies minimum and average dilution at the edge of the ZOM (Stations MB-2 through MB-5). In addition, the ZOM Dilution Analysis Study shall verify the presence or absence of assimilative capacity for nitrate+nitrite and ammonia nitrogen based on receiving water data at and beyond the edge of the ZOM.

   i. Within 180 calendar days of the effective date of this permit, the Permittee shall submit a ZOM Dilution Analysis Study Work Plan to DOH. The Work Plan shall provide a detailed discussion regarding the method by which minimum and average dilution shall be evaluated and specify a time frame for the analysis. In addition, the Work Plan shall include a discussion of the hydraulics of the ZOM, significant variables that impact available dilution within the ZOM, identify data necessary to complete the dilution study, include a plan to acquire necessary data, and identify any known potential challenges to completing the study.

      The Permittee shall incorporate all comments from DOH into the Work Plan. Within nine (9) months of the effective date of this permit, the Permittee shall implement the Work Plan with any necessary revisions.

   ii. Within two (2) years of the effective date of this permit, the Permittee shall provide an update to DOH on the status of the dilution analysis and provide any preliminary data and results available at that time.

   iii. Within three (3) years of the effective date of this permit, the Permittee shall submit a final report to DOH which; summarizes the method and results of the ZOM Dilution Analysis Study, identifies and supports a minimum and annual average dilution at the edge of the ZOM, and verifies the presence or absence of assimilative capacity for nitrate+nitrite and ammonia nitrogen.

b. In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include new effluent limitations or permit conditions based on information provided from the ZOM Dilution Analysis Study; or to implement new, revised, or newly interpreted water quality standards applicable to HAR, Chapter 11-54-6, water quality standards.

6. Annual Receiving Water Monitoring Programs

The Permittee shall submit an annual receiving water monitoring report by March 31st of each year. The annual receiving water monitoring reports shall summarize and discuss monitoring results for the previous year. Reports shall include, at minimum:

a. A description of climatic and receiving water characteristics at the time of sampling (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 sediment, rocks, and shell litter, calcareous worm tubes, etc.). In addition, the Permittee shall include the distance from shore for each nearshore sampling station.

c. A record shall be kept of the individual(s) performing sampling or measurements. A description of the sample collection and preservation procedures used in the survey shall be included in the report.

d. A description of methods used for laboratory analyses. Variations in procedure may be acceptable, but any such changes shall be reported to the EPA and DOH, before implementation. All such variations must be reported with the analytical results.

e. An in-depth discussion of monitoring results. All tabulations and computations shall be explained.

F. WASTEWATER POLLUTION PREVENTION PROGRAM

1. Annual Report

   The Permittee shall submit an annual report summarizing critical parameters which impact the operations of the facility to the DOH by March 31 of each year, unless otherwise instructed by the DOH. The report shall include, at a minimum, an evaluation of critical parameters, including the following:

   a. Flow;

   b. BOD_5 loading;

   c. TSS 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 collection system; and,

   i. Treatment capacity based on additional information.

2. Flow Rate Notification

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

   a. Date on which the 30-day average discharge flow rate equals or exceeds 75% of the actual treatment capacity of the facility.

   b. Estimate of when the 30-day average discharge flow rate will equal or exceed the actual treatment capacity of the facility.

   c. 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 for Flow Rate Notification

   a. The Permittee shall comply with the provisions of the schedule of compliance after approval by the Director.

   b. The Permittee shall initiate contingency plans to provide additional treatment capacity not later than 90 calendar days following the date on which the 30-day average discharge flow rate equals or exceeds 85% of the actual treatment capacity of the facility as reported in Part F.1.i.

   c. The Director may grant a special exemption to eliminate the requirement for a contingency plan. The Permittee shall request such exemption in writing and may include the request in the annual report. The Director shall notify the Permittee in writing of his decision.

G. PRETREATMENT REQUIREMENTS

1. The Permittee shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained in 40 CFR 403, including any subsequent regulatory revisions. Where 40 CFR 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 actions within 6 months from the issuance date of this permit or the effective date of the 40 CFR 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 nondomestic users subject to the 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 403 including, but not limited to:

   a. Implement the necessary legal authorities to fully implement the pretreatment regulations as provided in 40 CFR 403.8(f)(1);

   b. Enforce the national pretreatment standards for prohibited discharges and categorical standards as provided in 40 CFR 403.5 and 403.6, respectively;

   c. Implement the pragmatic functions as provided in 40 CFR 403.8(f)(2); and

   d. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 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 February 28 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 Clean Water Act 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 under Part H of this permit. The Permittee shall also provide any influent or effluent monitoring data for nonpriority 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 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 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 the 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) The type of wastewater treatment or control processes in place;

   (4) The number of samples taken by the Permittee during the year;

   (5) The 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) A 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 in 40 CFR 403.8(f)(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.

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 by 40 CFR 403.8(f)(2)(vii).

i. Annual reports shall be submitted to the following agencies:

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

(b) Regional Pretreatment Coordinator (WTR-5)
Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

H. SLUDGE/BIOSOLIDS REQUIREMENTS

1. Sludge Use/Disposal Requirements

   a. General Conditions and Requirements

      (1) Acceptable Sludge Use/Disposal Practices

         (a) The Permittee shall dispose of all sludge generated at the facility at a municipal solid waste landfill, at a sludge surface disposal site, by land application, or by transferring the sludge 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.

         (b) 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 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 containing the information required under 40 CFR Section 503.20(b).

         (c) The Permittee shall dispose of sludge containing more than 50 mg/kg of PCBs in accordance with 40 CFR 761.

         (d) 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 180 calendar days prior to the commencement of the alternate disposal practice.

      (2) Duty to Mitigate

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

            (i) 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.

(ii) Subsequent preparers, appliers, 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.

(iii) Sludge is not allowed to enter State waters, or to contaminate an underground drinking water source.

(iv) Sludge treatment, storage, use, and disposal do not create a public nuisance.

(v) Haulers who ship non-Class A sludge off-site for additional treatment, use, or disposal take all necessary measures to keep sludge contained.

(b) 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.

(3) Other Conditions

(a) The Director 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.

(b) 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.

(c) The requirements in 40 CFR 503 are enforceable by the EPA independently of being included in this permit.

b. Sludge Limitations and Monitoring Requirements

(1) Sludge shall be limited and monitored by the Permittee as specified below:

(a) Sludge Disposed of in Municipal Solid Waste Landfills

Monitoring Parameter/Test Procedures	Limitation	Monitoring Frequency
Paint Filter Test (EPA Method 9095B)	No "Free Liquids"[1]	1/Year
Toxicity Characteristic Leaching Procedure (TCLP) Test[2]	[2]	1/Year
Priority Pollutants[3]	N/A	1/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 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.

3 Priority pollutants are listed under the Act Section 307(a).

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

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

Parameter	Limitation (Mg/kg)							Monitoring Frequency
	0<25 m	25<50 m	50<75 m	75<100 m	100<125 m	125<150 m	>150 m	
Arsenic[1]	30	34	39	46	53	62	73	[2]
Chromium[1]	200	220	260	300	360	450	600	[2]
Nickel[1]	210	240	270	320	390	420	420	[2]
TCLP Test[3]	[3]							1/Year
Priority Pollutants[4]	N/A							1/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/Year)	Monitoring Frequency
0 - 290	1/Year (November)
290 – 1,500	1/Quarter (Feb/May/Aug/Dec)
1,500 – 15,000	6/Year (Feb/Apr/Jun/Aug/Oct/Dec)
>15,000	1/Month

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

[4] Priority pollutants are listed under the CWA Section 307(a).

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

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

The Permittee shall obtain and comply with the Wastewater Management Individual Permit, issued by the DOH, Wastewater Branch.

(2) The Permittee shall develop a representative sampling plan for monitoring toxics reduction, including the number and location of sampling points.

(a) 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.

(b) If pathogen reduction is determined by time and temperature, the plan shall be designed to determine temperatures throughout the batch being treated.

(c) 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.

c. Requirements for Sludge Disposed of in Municipal Solid Waste Landfill

(1) The Permittee shall dispose sludge in municipal solid waste landfills that meet the requirements of 40 CFR 258; and HAR, Chapter 11-58.1.

(2) Sludge shall not contain “free liquids” as defined by EPA Method 9095B (Paint Filter Liquids Test).

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

(1) 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 503 Subpart C and additional pollutant limits requested by the Director.

(2) 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.

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

The Permittee shall obtain and comply with the Wastewater Management Individual Permit, issued by the DOH, Wastewater Branch.

f. Notification Requirements

(1) If sludge other than exceptional quality sludge is shipped to another state or to Indian lands, the Permittee shall notify the permitting authorities in the receiving state or Indian land (the EPA Regional Office for that area and the State or Indian authorities) 60 calendar days prior to shipment.

(2) The Permittee shall notify the EPA Regional Sludge Coordinator and the Director of any non-compliance that may seriously endanger public health or the environment within 24 hours after becoming aware of the non-compliance. A written non-compliance report shall be submitted, postmarked, or faxed within five working days after the Permittee becomes aware of the noncompliance.

(3) The Permittee shall report all other instances of non-compliance not reported under Part H.1.f.(2) at the time discharge monitoring reports are submitted as required by Part I.1 of this permit.

g. 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. The report shall provide the following information:

(1) Total amount of sludge generated that year and a breakdown of the usage/disposal methods employed (in dry weight, metric tons).

(2) Results of all monitoring required by Part H.1.b.

(3) 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."

(4) If sludge was disposed in a surface disposal site, the following information shall be included:

(a) Requirements specified in 40 CFR 503.27.

(b) Name and mailing address of surface disposal operator if different from Permittee.

(c) Location (street address and latitude and longitude) of surface disposal site.

(d) 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.

(5) If sludge was land-applied, the following information shall be included:

(a) Requirements specified in 40 CFR 503.17(a) for all facilities preparing sludge for land application or reference to that facility's report, if submitted to EPA separately.

(b) Names and addresses of all facilities receiving the non-exceptional quality sludge, including land appliers and those facilities providing further treatment/blending prior to land application.

(c) Location of land application sites of non-exceptional quality sludge (street address, latitude and longitude) and sizes of parcels.

(d) Crops grown, agronomic rate for the crops grown, and certification by the land appliers of non-exceptional quality sludge that the sludge was applied at a rate not exceeding the agronomic rate determined for each crop.

(e) Copies of other certification statements by land appliers of non-exceptional quality sludge.

(6) If sludge was stored, the following information shall also be included:

(a) Age of stored sludge.

(b) Name and mailing address of operator of storage site if different from Permittee.

(b) Location of stored sludge (street address, latitude and longitude).

(7) 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.

(8) Annual reports shall be submitted to DOH through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool to locate the form. Follow the instruction to complete and submit this form. All submissions shall include a CD or DVD containing the downloaded e-Permitting

submission and a completed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form, with original signature and date.

(9) A copy of the Annual report shall be submitted to EPA and DOH at the following addresses:

Regional Sludge Coordinator (WTR-5)
Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Wastewater Sludge Program Manager
Wastewater Branch
Environmental Management Division
Department of Health
919 Ala Moana Boulevard, Room 309
Honolulu, HI 96814-4920

2. Requirements for Receiving Sludge

a. Approval

Upon written request by the Permittee and approval by the Director, the Permittee may pump sludge hauled from the Permittee's other wastewater treatment plants directly to the facility's dissolved air floatation thickeners or anaerobic digesters through a sludge receiving station. The sludge receiving station shall be equipped to record the source and amount of sludge pumped to the digesters.

b. Reporting

The Permittee shall submit a monthly log reporting the sources and amounts of the sludge pumped into the digester during the calendar month. The log shall be submitted with the monthly DMRs.

c. Retraction

The Director reserves the right to retract the approval should the facility's treatment design capacity be exceeded, the effluent discharge monitoring results be in non-compliance with this permit, or the Director deems necessary.

I. REPORTING REQUIREMENTS

1. Schedule of Submission

   a. Effluent and Receiving Water Monitoring Programs

      (1) Effluent Monitoring Program

      Within 30 calendar days after the effective date of this permit, the Permittee shall submit an updated/revised Effluent Monitoring Program which complies with Part A of this permit to the Director for approval.

      (2) The Programs(s) shall include at a minimum, but not be limited to the following:

      (a) Sampling location map;
      (b) Sample holding time;
      (c) Preservation techniques;
      (d) Test method and method detection level; and
      (e) Quality control measures.

      The DOH reserves the right to require the Permittee to revise the approved program, as appropriate, pursuant toward compliance with the terms and conditions of this permit.

      Monitoring shall be conducted according to test procedures approved under 40 CFR 136 with detection limits low enough to measure the compliance with Part A of this permit. For cases where the discharge limitation is below the lowest detection limit of the appropriate test procedure, the compliance shall be based upon the lowest detection limit of the method.

   If a test method has not been promulgated for a particular constituent, the Permittee may use any suitable method for measuring the level of the constituent in the discharge provided the Permittee submit a description of the method or a reference to a published method.

2. Transmittal and Monitoring Results Reporting Requirements

   a. Certification of Transmittals

      Submit all information in accordance with HAR, Section 11-55-07(b), with the following certification statement by an appropriate signatory:

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

b. Include **Permit No. HI 0021296** on each transmittal.

Failure to provide the assigned permit number for this facility on future correspondence or transmittals may be a basis for delay of the processing of the document(s).

c. Reporting of Discharge and Monitoring Results

(1) All wastewater monitoring, and biosolids/sludge monitoring, sample preservation, and analyses shall be performed as described in the most recent edition of 40 CFR 136, unless otherwise specified in this permit. All receiving water monitoring, sample preservation, and analyses shall be performed as specified in this permit.

(2) In accordance with 40 CFR 122.45(c), effluent analyses for metals shall be reported as total recoverable.

(3) Monitoring results shall be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). The results of all monitoring required by this permit shall be submitted in a format which allows direct comparison with the limitations in Part A and other requirements of this permit.

(4) For the purposes of reporting, the Permittee shall use the reporting threshold equivalent to the laboratory's method detection limit (MDL). As such, the Permittee must conduct influent and effluent analyses in accordance with the method specified Appendix 1 of this permit and must utilize a standard calibration where the lowest standard point is equal to or less than the concentration of the minimum level (ML).

(a) The MDL is defined as the minimum concentration of an analyte that can be detected with 99% confidence.

(b) The ML is defined as 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.

Analytical results at or above the laboratory's ML shall be reported on DMRs 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 sigma (σ) value (determined by the laboratory during the MDL study). Analytical results below the laboratory's MDL shall be reported as less than the MDL (i.e., "< 10").

(5) Should there be no discharges during the monitoring period, the DMR form shall so state

(6) All receiving water data shall be submitted annually to EPA's Storage and Retrieval Date Warehouse (STORET) in accordance with Water Quality Exchange (WQX) specifications (or equivalent data base/submission guidelines, as directed by the EPA).

Receiving water data shall be submitted electronically, as directed by EPA, to the following address:

U.S. Environmental Protection Agency
Monitoring and Assessment Office, WTR-2
75 Hawthorn Street
San Francisco, CA 94105

d. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant at location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified in 40 CFR 136, the results of such monitoring shall be included in the calculation and reporting of the values required in the DMR form. The increased frequency shall also be indicated.

e. Submittal of Monitoring Results Using NetDMR

The Permittee shall submit DMRs required under this permit electronically using NetDMR. NetDMR is accessed from: http://www.epa.gov/netdmr.

DMRs shall be submitted electronically no later than the 28th day of the month following the completed reporting period. Once a Permittee begins submitting DMRs using NetDMR, it will no longer be required to submit hard copies of DMRs to the Director, unless otherwise requested by the Director.

f. Schedule of Submission

(1) The Permittee shall submit reports to the Director as specified below.

Report	Reporting Period	Report Due Date
Discharge Monitoring Report	1/Month	28th day of the month following completed reporting period
SIU Compliance Status Report	2/Year	July 31 and December 31 of each year
Sludge/Biosolids Annual Report	1/Year	February 19 of each year
Pretreatment Annual Report	1/Year	February 28 of each year
Annual Receiving Water Monitoring Report	1/Year	March 31 of each year
Wastewater Pollution Prevention Program Annual Report	1/Year	March 31 of each year
Initial Investigation TRE Workplan	1/Permit Term	90 days after permit effective date
ZOM Dilution Analysis Study Work Plan	1/Permit Term	180 days after permit effective date
ZOM Dilution Analysis Study Report	1/Permit Term	3 years after permit effective date

Signed copies of monitoring and all other reports required by this permit, except those described in Part I.2.e of this permit, shall be submitted to the Director through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool to locate the form. Follow the instruction to complete and submit this form. All submissions shall include a CD or DVD containing the downloaded e-Permitting submission and a completed Transmittal Requirements and Certification Statement for e-Permitting NPDES/NGPC Compliance Submissions Form, with original signature and date.

Duplicate copies of the sludge reports shall be submitted to the Regional Administrator as specified in Part H of this permit.

(2) The Permittee shall submit reports to the Director as specified below.

Report	Reporting Period	Report Due Date
Shoreline Water Quality Monitoring	1/Month	28th day of the month following completed reporting period
Nearshore Water Quality Monitoring	1/Month	28th day of the month following completed reporting period
Offshore Water Quality Monitoring	1/Quarter	90th day following completed reporting period
STORET (or equivalent) Data Submission Report (Submit to EPA Only)	1/Year	March 31 of each year

Signed copies of monitoring and all other reports required by this permit, except those described in Part I.2.e of this permit, shall be submitted to the Director through the CWB Compliance Submittal Form for Individual NPDES Permits and NGPCs. This form is accessible through the e-Permitting Portal website at: https://eha-cloud.doh.hawaii.gov/epermit/View/home.aspx.

3. Reporting of Noncompliance, Unanticipated Bypass, or Upset

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 DOH at the time the Permittee's authorized personnel become aware of the circumstances, but no later than 24 hours after the event.

(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 DOH 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 DOH 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 DOH, Clean Water Branch (CWB) 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 non-compliances requiring immediate reporting, the Permittee shall submit a written non-compliance report. The Permittee shall submit the report to the DOH, CWB, in accordance with Part I.2.f.(1) within five working days after the Permittee's authorized personnel becomes aware of the noncompliance.

(2) The report shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times; if the non-compliance 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 non-compliance.

(3) The Director may waive the written report or the five (5) working 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 non-compliance or when the Permittee's authorized personnel becomes aware of the non-compliance.

d. Other Non-Compliance

The Permittee shall report all other instances of non-compliance not reported under Part I.2.a at the time DMRs are submitted as required by Part I.1 of this permit. The non-compliance reports shall contain the information requested in Part I.3.c.(2) of this permit.

4. Other Reporting Requirements

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

5. Planned Changes

   Any planned physical alterations or additions to the permitted facility, not covered by Standard Condition 16.a.(1), (2) or (3) shall be reported to the Director on a quarterly basis.

6. Types of Sample

   a. "Grab sample" means an individual sample collected at a randomly-selected time over a period not exceeding 15 minutes.

   b. "Composite sample" means a combination of at least eight (8) sample aliquots, collected at periodic intervals during the operating hours of the facility over a 24-hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the 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.

J. SPECIAL CONDITIONS

1. Wastewater treatment facilities subject to this permit shall be supervised and operated by persons possessing certificates of appropriate grade, as determined by the DOH. If such personnel are not available to staff the wastewater treatment facilities, a program to promote such certification shall be developed and enacted by the Permittee. Activities of this program shall be reported in the Annual Report in Part F of this permit.

2. The Permittee shall maintain in good working order a sufficient alternate power source for operating the wastewater treatment and disposal facilities. All equipment shall be located to minimize failure due to moisture, liquid spray, flooding, and other physical phenomena. The alternate power source shall be designed to permit inspection and maintenance and shall provide for periodic testing. If such alternate power source is not in existence, the Permittee shall halt, reduce, or otherwise control all discharges upon the reduction, loss, or failure of the primary source of power.

3. This permit may be reopened and modified, in accordance with NPDES regulations at 40 CFR 122 and 124, as necessary, to include additional conditions or limitations based on newly available information.

K. LOCATION AND ZOM AND RECEIVING WATER STATION MAPS

(See Figures 1 and 2)

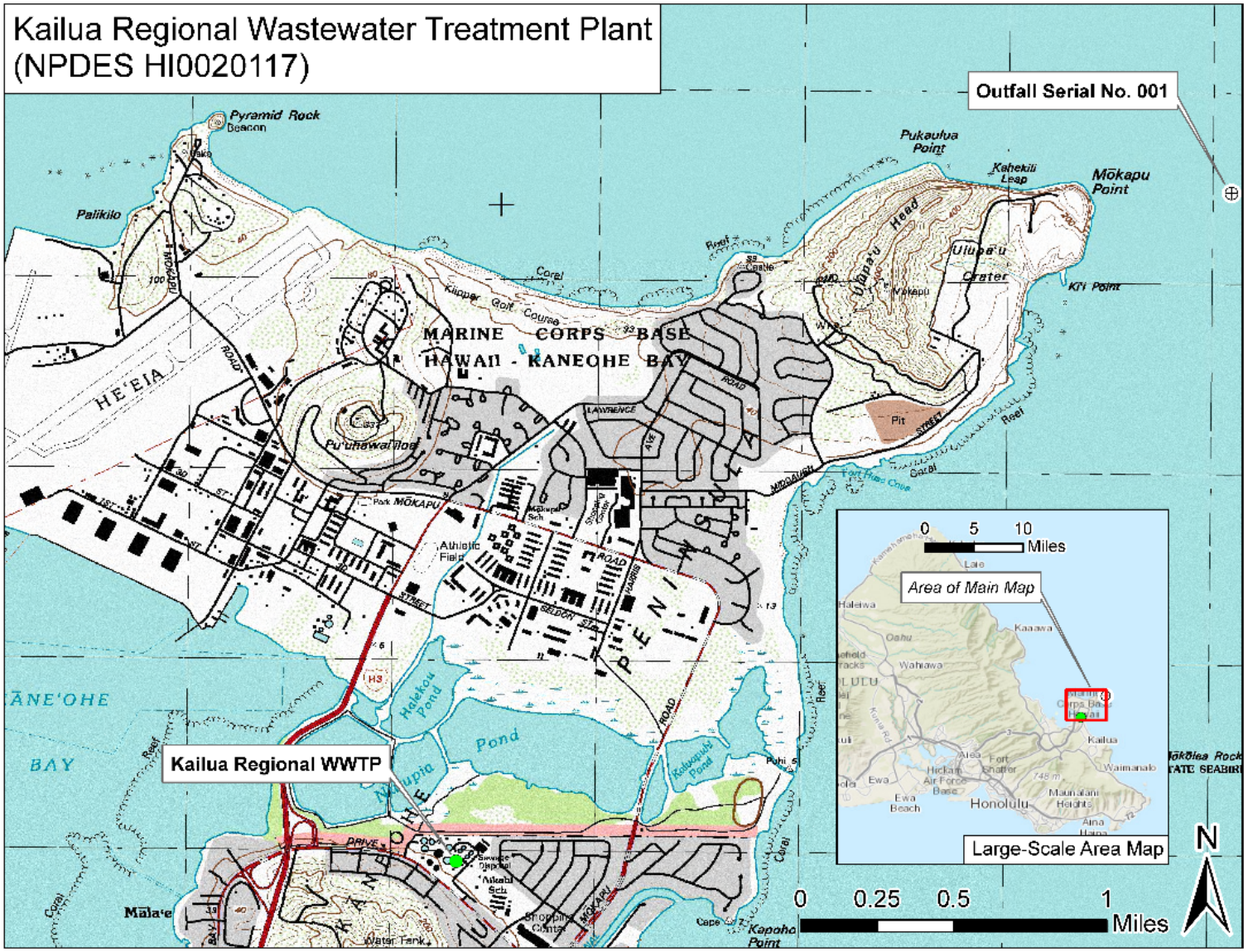

Figure 1 – Location Map

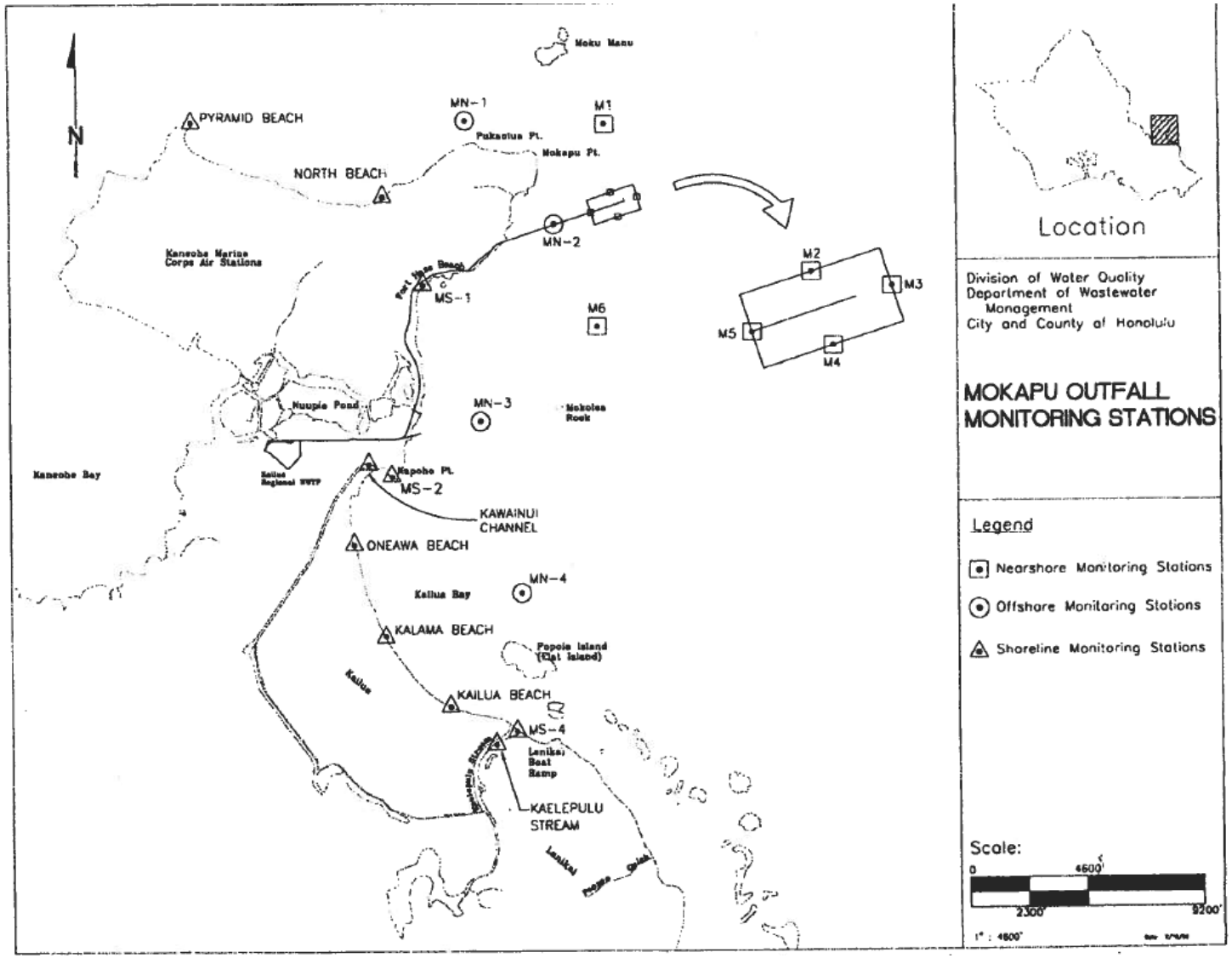

Figure 2 – Zone of Mixing (ZOM) and Receiving Water Monitoring Locations

APPENDIX 1 – MONITORING METHODS

Discharge Parameter	Sample Type	Analytical Method
Metals		
Antimony	24-Hour Composite	As specified in 40 CFR 136
Arsenic	24-Hour Composite	As specified in 40 CFR 136
Beryllium	24-Hour Composite	As specified in 40 CFR 136
Cadmium	24-Hour Composite	As specified in 40 CFR 136
Chromium	24-Hour Composite	As specified in 40 CFR 136
Copper	24-Hour Composite	As specified in 40 CFR 136
Lead	24-Hour Composite	As specified in 40 CFR 136
Mercury	24-Hour Composite	As specified in 40 CFR 136
Nickel	24-Hour Composite	As specified in 40 CFR 136
Selenium	24-Hour Composite	As specified in 40 CFR 136
Silver	24-Hour Composite	As specified in 40 CFR 136
Thallium	24-Hour Composite	As specified in 40 CFR 136
Zinc	24-Hour Composite	As specified in 40 CFR 136
Pesticides		
Aldrin	24-Hour Composite	As specified in 40 CFR 136
Chlordane	24-Hour Composite	As specified in 40 CFR 136
Dieldrin	24-Hour Composite	As specified in 40 CFR 136
4,4'-DDT	24-Hour Composite	As specified in 40 CFR 136
4,4'-DDE	24-Hour Composite	As specified in 40 CFR 136
4,4'-DDD	24-Hour Composite	As specified in 40 CFR 136
Alpha-Endosulfan	24-Hour Composite	As specified in 40 CFR 136
Beta Endosulfan	24-Hour Composite	As specified in 40 CFR 136
Endosulfan Sulfate	24-Hour Composite	As specified in 40 CFR 136
Endrin	24-Hour Composite	As specified in 40 CFR 136
Endrin Aldehyde	24-Hour Composite	As specified in 40 CFR 136
Heptachlor	24-Hour Composite	As specified in 40 CFR 136
Heptachlor Epoxide	24-Hour Composite	As specified in 40 CFR 136
Alpha BHC	24-Hour Composite	As specified in 40 CFR 136
Beta BHC	24-Hour Composite	As specified in 40 CFR 136
Delta BHC	24-Hour Composite	As specified in 40 CFR 136
Gamma BHC (Lindane)	24-Hour Composite	As specified in 40 CFR 136
Toxaphene	24-Hour Composite	As specified in 40 CFR 136
PCB 1016	24-Hour Composite	As specified in 40 CFR 136
PCB 1221	24-Hour Composite	As specified in 40 CFR 136
PCB 1232	24-Hour Composite	As specified in 40 CFR 136
PCB 1242	24-Hour Composite	As specified in 40 CFR 136
PCB 1248	24-Hour Composite	As specified in 40 CFR 136
PCB 1254	24-Hour Composite	As specified in 40 CFR 136
PCB 1260	24-Hour Composite	As specified in 40 CFR 136
Base/Neutral Extractables		
Acenaphthene	24-Hour Composite	As specified in 40 CFR 136
Acenaphthylene	24-Hour Composite	As specified in 40 CFR 136
Anthracene	24-Hour Composite	As specified in 40 CFR 136
Benzidine	24-Hour Composite	As specified in 40 CFR 136
Benzo(a)Anthracene	24-Hour Composite	As specified in 40 CFR 136
Benzo(a)Pyrene	24-Hour Composite	As specified in 40 CFR 136
Benzo(b)Fluoranthene	24-Hour Composite	As specified in 40 CFR 136

Discharge Parameter	Sample Type	Analytical Method
Benzo(g,h,i)Perylene	24-Hour Composite	As specified in 40 CFR 136
Benzo(k)Fluoranthene	24-Hour Composite	As specified in 40 CFR 136
Bis(2-Chloroethoxy)Methane	24-Hour Composite	As specified in 40 CFR 136
Bis(2-Chloroethyl)Ether	24-Hour Composite	As specified in 40 CFR 136
Bis(2-Chloroisopropyl)Ether	24-Hour Composite	As specified in 40 CFR 136
Bis(2-Ethylhexyl)Phthalate	24-Hour Composite	As specified in 40 CFR 136
4-Bromophenyl Phenyl Ether	24-Hour Composite	As specified in 40 CFR 136
Butyl Benzyl Phthalate	24-Hour Composite	As specified in 40 CFR 136
2-Chloronaphthalene	24-Hour Composite	As specified in 40 CFR 136
Chrysene	24-Hour Composite	As specified in 40 CFR 136
Dibenzo(a,h)Anthracene	24-Hour Composite	As specified in 40 CFR 136
4-Chlorophenyl Phenyl Ether	24-Hour Composite	As specified in 40 CFR 136
1,2-Dichlorobenzene	24-Hour Composite	As specified in 40 CFR 136
1,3-Dichlorobenzene	24-Hour Composite	As specified in 40 CFR 136
1,4-Dichlorobenzene	24-Hour Composite	As specified in 40 CFR 136
3,3-Dichlorobenzidine	24-Hour Composite	As specified in 40 CFR 136
Diethyl Phthalate	24-Hour Composite	As specified in 40 CFR 136
Dimethyl Phthalate	24-Hour Composite	As specified in 40 CFR 136
Di-N-Butyl Phthalate	24-Hour Composite	As specified in 40 CFR 136
2,4-Dinitrotoluene	24-Hour Composite	As specified in 40 CFR 136
2,6-Dinitrotoluene	24-Hour Composite	As specified in 40 CFR 136
1,2-Diphenylhydrazine (as Azobenzene)	24-Hour Composite	As specified in 40 CFR 136
Di-N-Octyl Phthalate	24-Hour Composite	As specified in 40 CFR 136
Fluoranthene	24-Hour Composite	As specified in 40 CFR 136
Fluorene	24-Hour Composite	As specified in 40 CFR 136
Hexachlorobenzene	24-Hour Composite	As specified in 40 CFR 136
Hexachlorobutadiene	24-Hour Composite	As specified in 40 CFR 136
Hexachlorocyclopentadiene	24-Hour Composite	As specified in 40 CFR 136
Hexachloroethane	24-Hour Composite	As specified in 40 CFR 136
Indeno(1,2,3-cd)Pyrene	24-Hour Composite	As specified in 40 CFR 136
Isophorone	24-Hour Composite	As specified in 40 CFR 136
Naphthalene	24-Hour Composite	As specified in 40 CFR 136
Nitrobenzene	24-Hour Composite	As specified in 40 CFR 136
N-Nitrosodimethylamine	24-Hour Composite	As specified in 40 CFR 136
N-Nitrosodi-N-Propylamine	24-Hour Composite	As specified in 40 CFR 136
N-Nitrosodiphenylamine	24-Hour Composite	As specified in 40 CFR 136
Phenanthrene	24-Hour Composite	As specified in 40 CFR 136
Pyrene	24-Hour Composite	As specified in 40 CFR 136
1,2,4-Trichlorobenzene	24-Hour Composite	As specified in 40 CFR 136
Acid Extractables		
2-Chlorophenol	24-Hour Composite	As specified in 40 CFR 136
2,4-Dichlorophenol	24-Hour Composite	As specified in 40 CFR 136
2,4-Dimethylphenol	24-Hour Composite	As specified in 40 CFR 136
4,6-Dinitro-O-Cresol	24-Hour Composite	As specified in 40 CFR 136
2,4-Dinitrophenol	24-Hour Composite	As specified in 40 CFR 136
2-Nitrophenol	24-Hour Composite	As specified in 40 CFR 136
4-Nitrophenol	24-Hour Composite	As specified in 40 CFR 136

Discharge Parameter	Sample Type	Analytical Method
P-Chloro-M-Cresol	24-Hour Composite	As specified in 40 CFR 136
Pentachlorophenol	24-Hour Composite	As specified in 40 CFR 136
Phenol	24-Hour Composite	As specified in 40 CFR 136
2,4,6-Trichlorophenol	24-Hour Composite	As specified in 40 CFR 136
Volatile Organics		
Acrolein	Grab	As specified in 40 CFR 136
Acrylonitrile	Grab	As specified in 40 CFR 136
Benzene	Grab	As specified in 40 CFR 136
Bromoform	Grab	As specified in 40 CFR 136
Carbon Tetrachloride	Grab	As specified in 40 CFR 136
Chlorobenzene	Grab	As specified in 40 CFR 136
Chlorodibromomethane	Grab	As specified in 40 CFR 136
Chloroethane	Grab	As specified in 40 CFR 136
2-Chloroethyl Vinyl Ether	Grab	As specified in 40 CFR 136
Chloroform	Grab	As specified in 40 CFR 136
Dichlorobromomethane	Grab	As specified in 40 CFR 136
1,1-Dichloroethane	Grab	As specified in 40 CFR 136
1,2-Dichloroethane	Grab	As specified in 40 CFR 136
1,1-Dichloroethylene	Grab	As specified in 40 CFR 136
1,2-Dichloropropane	Grab	As specified in 40 CFR 136
1,3-Dichloropropylene	Grab	As specified in 40 CFR 136
Ethylbenzene	Grab	As specified in 40 CFR 136
Methyl Bromide	Grab	As specified in 40 CFR 136
Methyl Chloride	Grab	As specified in 40 CFR 136
1,1,2,2-Tetrachloroethane	Grab	As specified in 40 CFR 136
Tetrachloroethylene	Grab	As specified in 40 CFR 136
Toluene	Grab	As specified in 40 CFR 136
1,2-Trans-Dichloroethylene	Grab	As specified in 40 CFR 136
1,1,1-Trichloroethane	Grab	As specified in 40 CFR 136
1,1,2-Trichloroethane	Grab	As specified in 40 CFR 136
Trichloroethylene	Grab	As specified in 40 CFR 136
Vinyl Chloride	Grab	As specified in 40 CFR 136
Miscellaneous		
Cyanide	Grab	As specified in 40 CFR 136
Asbestos (Not required unless specified)	24-Hour Composite	As specified in 40 CFR 136
2,3,7,8-Tetrachlorodibenzon-P-Dioxin (TCDD)	24-Hour Composite	As specified in 40 CFR 136
301(h) Pesticides		
Demeton	24-Hour Composite	As specified in 40 CFR 136
Guthion	24-Hour Composite	As specified in 40 CFR 136
Parathion	24-Hour Composite	As specified in 40 CFR 136
Malathion	24-Hour Composite	As specified in 40 CFR 136
Mirex	24-Hour Composite	As specified in 40 CFR 136
Methoxychlor	24-Hour Composite	As specified in 40 CFR 136