US ERA ARCHIVE DOCUMENT

DEPARTMENT OF ENVIRONMENTAL SERVICES

CITY AND COUNTY OF HONOLULU

1000 ULUOHIA STREET, SUITE 308 . KAPOLEI, HAWAII 96707 PHONE: (808) 692-5159 • FAX: (808) 692-5113 • Website: www.co.honolulu.hi.us

JEREMY HARRIS Mayor



AUG 3 0 2004

- 150 d. 8/51/200

FRANK J. DOYLE, P.E. Director

TIMOTHY A. HOUGHTON **Deputy Director**

EMC 04-290

Ms. Alexis Strauss, Director U.S. Environmental Protection Agency Region IX, Water Division 75 Hawthorne Street San Francisco, California 94105

Gentlemen:

Subject:

Updated Permit Reapplication for the Honouliuli Wastewater Treatment Plant

NPDES No. HI 0020877

Please find attached, the subject updated Permit Reapplication. The update is based upon the permit reapplication submitted in December 1995, and the update submitted in January 2000.

The current update includes descriptions of the newest plant components and operations. Also, the update reflects issues from current monitoring results, such as the Water Quality Monitoring and the Whole Effluent Toxicity Tests.

We are still in the process of obtaining laboratory analyses of various wastestreams, including the primary treatment effluent. Since we normally analyze the outfall discharge (which has been a combination of primary, secondary and tertiary streams for many years), we do not have current primary effluent-only data. We will submit the updated analysis in the near future.

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 and imprisonment for knowing violations.

If there are any questions, please contact Ross Tanimoto from our Division of Environmental Quality at (808) 692-5371.

Sincerely,

FRANK/J. DOYLE. P.E.

Director

HONOULIULI WASTEWATER TREATMENT PLANT 301 (h) NPDES WAIVER PERMIT REAPPLICATION VOLUME 2 OF 2

Prepared For

U.S. Environmental Protection Agency
State of Hawaii Department of Health

Prepared by



City and County of Honolulu
Department of Environmental Services

August 30, 2004

TABLE OF CONTENTS

VOLUME 1

	INTRO	DUCTION
I.	GENE	RAL INFORMATION AND BASIC DATA REQUIREMENTS
00000		I
I.A-	-1	
	A.	Treatment System Description II.A-1
	В.	Receiving Water Description
	П.В-1	
	C.	Biological Conditions II.C-1
	D.	State and Federal Laws II.D-1
Ш.	TECH	NICAL EVALUATION REQUIREMENTS DLA-1
		Physical Characteristics of Discharge [40 CFR 125.62(a)] Description
	A.	
	IILA-	
	B.	Compliance with Applicable Water Quality
		Standards and CWS §304(a)(i) Water Quality
		Criteria
		[40 CFR 125.61(b) and 125.62(a)]
		III.B-1
		Impact on Public Water Supplies [40 CFR 125.62(b)]
	C.	impact on Finance Water Supplies (18 1812)
		Ⅲ.C-1
	D.	Biological Impact of Discharge [40 CFR 125.62(c)]
		Ⅲ.D-1
		Impacts of Discharge on Recreational Activities
	E.	
		[40 CFR 125.62 (d)]
		III.E-1
	-	Establishment of a Monitoring Program [40 CFR 125.63]
	F.	Establishment of a Womtoring Program (10
	III.F	2-1
	22212	
	G.	Effect of Discharge on Other Point and Nonpoint Sources
		[40 CFR 125.64]

		.G-1
	H.	Toxics Control Program and Urban Area Pretreatment Program [40 CFR 125.65 and 125.66]
		[40 CFR 125.05 and 125.05]
		.H-1
137	DEF	FRENCES

CONTENTS (continued)

APPENDIXES

- A EXISTING NPDES PERMIT
- B RECEIVING WATER QUALITY DATA
- C DESCRIPTION OF BIOLOGICAL CONDITIONS
 - 1 Benthic Monitoring Program Description
 - 2 Benthic Monitoring Program Results for 1990-2003
 - 3 Fish Health Assessment
- D OCEANOGRAPHIC CONDITIONS AND CURRENTS
- E COMPLIANCE WITH STATE AND FEDERAL LAWS
 - 1 Hawaii Administrative Rules, Chapter 11, Title 54, Water Quality Standards
 - 2 Methodology for Determining Compliance with Water Quality Standards
 - 3 Letters of Compliance with State and Federal Laws only contains 2 pages = 2 letters
- F MODELING RESULTS

@ DUNK - 12/15/97

- Initial Dilution Calculations
 - 2 Sedimentation Analysis
 - 3 Analysis of Effluent Dissolved Oxygen Demand
- G ASSESSMENT OF IMPACT ON BENEFICIAL USES
 - 1 Recreational Waters Impact Assessment
 - 2 Commercial and Recreational Fisheries Assessment
 - 3 Bioaccumulation Data Evaluation
- H TOXICS CONTROL PROGRAM
- I PROPOSED MONITORING PROGRAM
- J PRIORITY POLLUTANT AND PESTICIDE DISCUSSION

Form

NPDES FORM 2A APPLICATION OVERVIEW

2A APDES

APPLICATION OVERVIEW

Form 2A has been developed in a modular format and consists of a "Basic Application Information" packet and a "Supplemental Application Information" packet. The Basic Application Information packet is divided into two parts. All applicants must complete Parts A and C. Applicants with a design flow greater than or equal to 0.1 mgd must also complete Part B. Some applicants must also complete the Supplemental Application Information packet. The following items explain which parts of Form 2A you must complete.

BASIC APPLICATION INFORMATION:

- A. Basic Application Information for all Applicants. All applicants must complete questions A.1 through A.8. A treatment works that discharges effluent to surface waters of the United States must also answer questions A.9 through A.12.
- B. Additional Application Information for Applicants with a Design Flow > or = 0.1 mgd. All treatment works that have design flows greater than or equal to 0.1 million gallons per day must complete questions B.1 through B.6.
- C. Certification. All applicants must complete Part C (Certification).

SUPPLEMENTAL APPLICATION INFORMATION:

- D. Expanded Effluent Testing Data. A treamtent works that discharges effluent to surface waters of the United States and meets one or more of the following criteria must complete Part D (Expanded Effluent Testing Data):
 - 1. Has a design flow rate greater than or equal to 1 mgd,
 - 2. Is required to have a pretreatment program (or has one in place), or
 - Is otherwise required by the permitting authority to provide the information.

Toxicity Testing Data. A treatment works that meets one or more of the following criteria must complete Part E (Toxicity Testing Data):

- Has a design flow rate greater than or equal to 1 mgd,
- 2. Is required to have a pretreatment program (or has one in place), or
- Is otherwise required by the permitting authority to provide the information.
- F. Industrial User Discharges and RCRA/CERCLA Wastes. A treatment works that accepts process wastewater from any significant industrial users (SIUs) or receives RCRA or CERCLA wastes must complete Part F (Industrial User Discharges and RCRA/CERCLA Wastes). SIUs are defined as:
 - All industrial users subject to Categorical Pretreatment Standards under 40 Code of Federal Regulations (CFR) 403.6 and 40 CFR Chapter I, Subchapter N (see instructions); and
 - 2. Any other industrial user that:
 - a. Discharges an average of 25,000 gallons per day or more of process wastewater to the treatment works (with certain exclusions); or
 - Contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the treatment plant; or
 - Is designated as an SIU by the control authority.
- G. Combined Sewer Systems. A treatment works that has a combined sewer system must complete Part G (Combined Sewer Systems).

ALL APPLICANTS MUST COMPLETE PART C (CERTIFICATION)

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet.

A.1	Facility Information.		
	Facility name	Honouliuli Wastewater Treatment Plant	
	Mailing Address	1000 Uluohia Street, Suite 308 Kapolei, HI 96707	
	Contact Person	Frank J. Dovle, P.E.	
	Title	Director	
	Telephone Number	(808) 692-5159	3
	Facility Address (not P.O. Box)	91-1501 Geiger Road Ewa Beach, HI 96706	·
A.2	Applicant Information. If the	e applicant is different from the above, provide the following:	
	Applicant name	City and County of Honolulu	
	Mailing Address	1000 Uluohia Street, Suite 308 Kapolei, HI 96707	
	Contact Person	Frank J. Doyle, P.E.	
	Title	Director	
	Telephone Number	(808) 692-5159	
	X owner	operator (or both) of the treatment works Operator Inches regarding this permit should be directed to the facility or the applicant applicant Applicant	
A.3	Existing Environmental Per (include state-issued permits	mits. Provide the permit number of any existing environmental permits that have).	been issued to the treatment works
	Permit Type Permit	Number Permit Type Permit Num (permit to discharge through an	nber (permit to discharge indust storm water)
	NPDES HI0020	877 outfall) NPDES GPC No. HI	R90A409
	Other <u>CSP N</u>	o. 0215-01-C (covered source air permit)	
A.4.		on. Provide information on municipalities and areas served by the facility. Provide information on the type of collection system (combined vs. separate) and its owner	
	Name	Population Served Type of Collection System	Ownership
	West Mamala Bay	336,448* Separate	Municipal

FACILITY NAME AND PERMIT NUMBER:

Total Population Served 336,448

	Indian Country.			送		
	a. Is the treatment works located in I	ndian Country?				
	Yes	x No				
	b. Does the treatment works discharged through) Indian Country?	ge to a receiving v	vater that is either in India	an Country or that is upstr	ream from (and event	ually flows
	Yes	y No				
						
i.	Flow. Indicate the design flow rate of the average daily flow rate and maxim time period with the 12th month of "this	um daily flow rate	for each of the last three	years. Each year's data	must be based on a 1	12-month
	a. Design flow rate38.00	00_ mgd	Two Years Ago	Last Year	This Year	
	b. Annual average daily flow rate	54	26,100	26.800	27.600	mgd
	c. Maximum daily flow rate		30.900	32.400	54.300	mgd ,
7.	Collection System. Indicate the type(s) of collection sys				the percen
	contribution (by miles) of each.	of or composition of				127
ν.	X Separate sar	nitary sewer		17	100 %	5
	Separate sai	mary conto				
		1.52			%	
	Combined st	torm and sanitary	sewer	_== .	%	
8.	Combined st	torm and sanitary s		· ·		No
8.	Discharges and Other Disposal Metha. Does the treatment works discharges	torm and sanitary s hods. rge effluent to wat	ers of the U.S.?	X Ye		No
8.	Combined st	torm and sanitary s hods. rge effluent to wat	ers of the U.S.?			No
в.	Discharges and Other Disposal Metha. Does the treatment works discharges	torm and sanitary shods. rge effluent to wate	ers of the U.S.?			_ No1
8.	Discharges and Other Disposal Metha. Does the treatment works dischard lifyes, list how many of each of	torm and sanitary shods. rge effluent to wate of the following typ	ers of the U.S.? bes of discharge points th			No10
8.	Discharges and Other Disposal Methalogous and Does the treatment works discharges, list how many of each of Discharges of treated efficiency.	torm and sanitary shods. rge effluent to wate of the following typ luent or partially treated	ers of the U.S.? bes of discharge points th			1
8.	Discharges and Other Disposal Metha. Does the treatment works discharges, list how many of each of the discharges of treated effluit. Discharges of untreated of the discharges of the discharges of untreated of the discharges of the discharges of untreated of the discharges of untreated of the discharges of the discharges of untreated of the discharges of the discharges of untreated of the discharges of	torm and sanitary shods. rge effluent to wate of the following typ luent or partially treated w points overflows (prior to	ers of the U.S.? pes of discharge points the effluent the headworks)	e treatment works uses:		
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8.	Discharges and Other Disposal Metha. a. Does the treatment works discharges of treated effloria. ii. Discharges of treated effloria. iii. Combined sewer overflow iv. Constructed emergency of Reclamation Factor. v. Other and off-site (industrial).	torm and sanitary shods. rge effluent to water of the following type the following type the following type the following type the following the following the following partially treated to points to the following the followin	ers of the U.S.? pes of discharge points the effluent the headworks) es on-site (plant processe gation). sins, ponds, or other surfater	es and recharge trench)	o not have outlets for	1 0 0 0
8.	Discharges and Other Disposal Metha. Does the treatment works dischard it yes, list how many of each of it. Discharges of treated effliction iii. Discharges of untreated of iii. Combined sewer overflow iv. Constructed emergency of Reclamation Factory. Other and off-site (industrial to waters of the U.S.?	torm and sanitary shods. rge effluent to water of the following type the following type the following type the following type the following the following the following partially treated to points to the following the followin	ers of the U.S.? pes of discharge points the effluent the headworks) es on-site (plant processe gation). sins, ponds, or other surfater	es and recharge trench)	o not have outlets for	1 0 0 0
8.	Discharges and Other Disposal Metha. If yes, list how many of each of the discharges of treated effluit. Discharges of untreated of the discharges of the discharges of untreated of the discharges of the dis	torm and sanitary shods. rge effluent to wate of the following type the following type the following type the following type the following th	ers of the U.S.? pes of discharge points the effluent the headworks) es on-site (plant processe gation). sins, ponds, or other surfaundment:	es and recharge trench)	o not have outlets for	1 0 0 0
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8.	Discharges and Other Disposal Metha. Does the treatment works dischard if yes, list how many of each of it. Discharges of treated effliction iii. Discharges of untreated of iii. Combined sewer overflow iv. Constructed emergency of Reclamation Factory. Other and off-site (industrial to waters of the U.S.? If yes, provide the following for expectation: Annual average daily volume of the control of the U.S.?	torm and sanitary shods. rge effluent to water of the following type the following the f	ers of the U.S.? pes of discharge points the effluent the headworks) es on-site (plant processe gation). sins, ponds, or other surfaction of the surfacti	es and recharge trench) ace impoundments that do	o not have outlets for a X	1 0 0 0

FACILITY NAME AND PERMIT NUMBER: Honouliuli WWTP Permit #H10020877

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Location:				
Number of acres:				
Annual average daily volume	applied to site:	mgd		
Is discharge	continuous or in	termittent		
d. Does the treatment works discr wastewater to another treatmen	narge or transport treated or untreated nt works?	X Yes	No	
If yes, describe the mean(s) by (e.g., tank truck, pipe).	which the wastewater from the treatment	works is discharged or transp	orted to the other treatment wo	rks
Pipeline discharge of	effluent to an on-site water reclam	ation facility		
If transport is by a party other t	han the applicant, provide:			
Transporter name:		1		
Mailing address:				
Contact person:				
500 50 100 645 144 7 470 1 10 1740 1447 1				
Title:				
Telephone number:			8	
Name:	Ewa Water Reclamation Facility			
Mailing address:	630 South Beretania Street Honoli	ulu, HI 96813		
Contact person:	Clifford Jamile		7	
Title:	Manager and Chief Engineer			
Telephone number:	(808) 748-5000			
If known, provide the NPDE	S permit number of the treatment works the	at receives this discharge.		
For each treatment works that rec Provide the average daily flo	ceives this discharge, provide the following ow rate from the treatment works into the re	: eceiving facility.	<u>13.00 mgd</u>	
e. Does the treatment works disc included in A.8.a through A.8.	charge or dispose of its wastewater in a madd above (e.g., underground percolation, we	anner not ell injection) X	Yes	No

If yes, provide the following for each disposal method:

FACILITY NAME AND PERMIT NUMBER: Honouliuli WWTP Permit #HI0020877

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Description of method (including location and size	of site(s) if applicable)):	
A non-potable aquifer recharge trench, loca	ted on-site, is availa	able as a R1	reclaimed water disposal site.
Annual daily volume disposed of by this method:	Currently, no	effluent flow	has been discharged into the recharge trench.
Is disposal through this method	continuous or	x	intermittent
A request for discharge of a lower quality ef Included in the request, are research docum			

Honouliuli WWTP Permit #HI0020877

WASTEWATER DISCHARGES:

If you answered "yes" to quetion A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a., go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9	Description of Out	fall.		•	
	a. Outfall number	SERIAL NO. 001			
	E facilities	F Dh		96706	
	b. Location	Ewa Beach (City of town, if applicable)		(Zip Code)	
		(0.1)			
		Honolulu		HI (Out to)	
		(County)		(State)	
		21-17-00 N		158-01-50 W	
		(Latitude)		(Longitude)	
	c. Distance from sl	nore (if applicable)	9,000	ft.	
	C. Distance nom si	iore (ii applicable)		-	
	d. Depth below sur	face (if applicable)	200	_ ^{ft.}	
	e. Average daily flo	ow rate	21.60	mgd	
	o. Avolugo dany m			-	
	 f. Does this outfall periodic discharge 	have either an intermittent or a		W	
	# 000 CO COMMON CONTROL TO SOME DATE OF THE CONTROL TO SOM	- 12 - 10 - 10 - 10 - 10 - 10 - 10 - 10	yes	X no (go to A.9.g)	
	If yes, provide the	ne following information:			
	Number of times	s per year discharge occurs:	X		
	Average duration	n of each discharge:	-		
	Average flow pe	er discharge:	1	mgd	
	Months in which	discharge occurs:			
	g. Is outfall equipp	ed with a diffuser?	X yes	no	
A.10	Description of Re	ceiving Waters.			
	a. Name of receivi	ng water West Mamala Bay	v		
	a. Name of receive	TY CSt Manada Da			
	b. Name of waters	hed (if known)			
	United States So	oil Conservation Service 14-digit w	ratershed code (if known):		
	c. Name of State I	Management/River Basin (if knowr	n):		
	United States G	eological Survey 8-digit hydrologic	cataloging unit code (if kno	wn):	
		of receiving stream (if applicable)			
	d. Officer low flow	or reserring or earn (in approache)	5.1		
	acute	cfs	chronic	cfs	
	e. Total hardness	of receiving stream at critical low t	flow (if applicable):	mg/l of CaCO	

X	Primary		Secondary	The City may intermitter the outfall. The discharge	ge <mark>may i</mark> nclude se		
	Advanced	X C	Other. Describe:	R1 reclaimed water and	or brine.		
. Indicated the fo	llowing removal rates (as	applicable):					
Design BOD ₅ r	emoval <u>or</u> Design CBOD	removal				30.0	%
Design SS ren	noval					30.0	%
Design P remo	oval						%
Design N remo	oval			<u> </u>			%
Other			19				%
			outfall? If disinfect	on varies by season, pleas	e describe.	-	
	effluent is not disinfe			22.1	22 7		
If disinfection is	by chlorination, is dechlor	orination used for the	his outfall?	Yes	X No) i	
Does the treatr	ment plan have post aera	tion?		Yes	X No	S 20	

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing dta for the following parameters Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: SERIAL NO. 001

PARAMETER	MAXIMUM D	AILY VALUE	AVERAGE DAILY VALUE			
	Value	Units	Value	Units	Number of Samples	
pH (Minimum)	6.89	s.u.				
pH (Maximum)	7.40	s.u.			国籍等基本企業 等	
Flow Rate	42.60	MGD	21.60	MGD	121	
Temperature (Winter)	28.5	°C	27.1	°C	62	
Temperature (Summer)	30.5	°C	29.3	°C	84	

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NON	CONVENTIO	ONAL COMP	OUNDS.					
BIOCHEMICAL OXYGEN	BOD-5	168.00	mg/l	129.00	mg/l	95	EPA 405.1	ML: 3 mg/l
DEMAND (Report one)	CBOD-5	0.00		0.00		0		
FECAL COLIFORM		13.00	M/100ml	5.40	M/100ml	121	SM 9222D	ML: 1 CFU/100 ml
TOTAL SUSPENDED SOLI	DS (TSS)	81.00	mg/l	42.00	mg/l	96	EPA 160.2	ML: 1 mg/l

END OF PART A.

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A

YOU MUST COMPLETE

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BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR

EQUAL TO 0.1 MGD (100,000 gallons per day). All applicants with a design flow rate greater than or equal to 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification) Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration. B.1. 9,350,000 gpd Briefly explain any steps underway or planned to minimize inflow and infiltration. "Sewer Rehabilitation and Infiltration & Inflow Minimization Study" (December 1999) identifies collection/treatment system deficiencies. Selected West Mamala Bay projects are included in the City Capital Improvement Program. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This B.2. map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.) The area surrounding the treatment plan, including all unit processes. a. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which b. treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable. Each well where wastewater from the treatment plant is injected underground. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail f. or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored and/or disposed. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup B.3. power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g., chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram. Operation/Maintenance performed by Contractor(s). B.4. Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary. Name: Mailing Address:

Telephone Number:

Responsibilites of Contractor:

FACILITY NAME AND PERMIT NUMBER: Honouliuli WWTP Permit #HI0020877

B.5.

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unc trea	ompleted plans for improvements th	at will affect the wastewater treatm	information on any uncompleted implementation schedule or nent, effluent quality, or design capacity of the treatment works. If the ning several improvements, submit separate response to question B.
a.	List the outfall number (assigned in	question A.9) for each outfall that	is covered by this implementation schedule.
	SERIAL NO. 001		
b.	Indicate whether the planned impro	vements or implementation sched	lule are required by local, State, or Federal agencies.
	Yes	X_No	
			2
c.	If the answer to B.5.b is "Yes," brie	fly describe, including new maximo	um daily inflow rate (if applicable).
d.	Provide dates imposed by any com For improvements planned indeper Indicate dates as accurately as pos	idently of local, State, or Federal a	tes of completion for the implementation steps listed below, as applicable. agencies, indicate planned or actual completion dates, as applicable.
		Schedule	Actual Completion
	Implementation Stage	MM / DD / YYYY	MM / DD / YYYY
	- Begin construction	1/1/2007	*
*	- End construction	1/1/2009	
	- Begin discharge	1/1/2009	
	- Attain operational level	1/1/2010	
e.	Have appropriate permits/clearance	e concerning other Federa/State re	equirements been obtained?. Yes X
	Describe briefly:		
			dling Facilities (Anaerobic Digesters). Consultant to prepare o obtain permits/clearances during appropriate project phases.
	A Design/Build concept for pro	oject implementation is being o	considered by the Administration.

The proposed anaerobic sludge digesters will discharge supernatant into the return flow, possibly affecting the plant influent quality. However, the proposed project return flow is expected to be similar to current solids stabilization process flows. The project schedule has been estimated from available preliminary data.

FACILITY NAME AND PERMIT NUMBER: Honouliuli WWTP Permit #HI0020877

B.6.

EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONC	ONVENTION	AL COMPOUN	IDS.				10
Ammonia (as N)	0.00	N/A	0.00	N/A	0		
Chlorine (Total Residual, TRC)	0.00	N/A	0.00	N/A	0		
Dissolved Oxygen	0.00	N/A	0.00	N/A	0	1 × 15	
Total Kjeldahl Nitrogen (TKN)	0.00	N/A	0.00	N/A	0		
Nitrate plus Nitrite Nitrogen	0.00	N/A	0.00	N/A	0		
Oil and Grease	32.40	mg/l	17.30	mg/l	9	1664A, SPE	ML: 5 mg/l
Phosphorus (Total)	0.00	N/A	0.00	N/A	0		
Total dissolved Solids (TDS)	0.00	N/A	0.00	N/A	0		

END OF PART B. REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

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Form Approved 1/14/99 OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which pa	arts of Form 2A you have completed and are	submitting:
X	Basic Application Information Packet	Supplemental Application Information packet:
		X Part D (Expanded Effluent Testing Data)
		X Part E (Toxicity Testing: Biomonitoring Data)
		X Part F (Industrial User Discharges and RCRA/CERCLA Wastes)
		Part G (Combined Sewer Systems)
L APPLICANTS MUST (COMPLETE THE FOLLOWING CERTIFICATION	ON.
		ation is, to the best of my knowledge and belief, true, accurate, and complete. I am cluding the possibility of fine and imprisonment for knowing violations.
	ant penalties for submitting false information, in	
vare that there are significated Name and official to	ant penalties for submitting false information, in title Frank J. Doyle, P.E., Director	
vare that there are significated Name and official the Signature	ant penalties for submitting false information, in title Frank J. Doyle, P.E., Director	

SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

(Complete once for each outfall discharging effluent to waters of the United States.)

Outfall Number	SERIAI	L NO. 0	001	. Е	ffluent sa	ampled	on 12/2	/2003;	Effluent flo	w on 12/2/2003: 24.	354 MGD.
POLLUTANT	M	AXIMUI	M DAILY		AV	ERAGE	DAILY	DISCHA	RGE	ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECO	OVERABI	LE), C	YANID	E, PHE	NOLS,	AND H	ARDN	ESS.			
Antimony	1.80	ug/l	0.20	Kg	1.80	ug/l	0.20	Kg	1.00	SM3113B	ML: 2.0 ug/l
Arsenic	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	SM3113B	ML: 2.0 ug/l
Berylium	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	SM3113B	ML: 0.10 ug/l
Cadmium	0.23	ug/l	0.02	Kg	0.23	ug/l	0.02	Kg	1.00	SM3113B	ML: 0.50 ug/l
Chromium	4.70	ug/l	0.40	Kg	4.70	ug/l	0.40	Kg	1.00	SM3113B	ML: 2.0 ug/l
Copper	42.00	ug/l	3.90	Kg	42.00	ug/l	3.90	Kg	1.00	SM3113B	ML: 2.0 ug/l
Lead	2.40	ug/l	0.20	Kg	2.40	ug/l	0.20	Kg	1.00	SM3113B	ML: 1.0 ug/l
Mercury	0.11	ug/l	0.09	Kg	0.11	ug/l	0.09	Kg	1.00	SM3113B	ML: 0.20 ug/l
Nickel	4.50	ug/l	0.40	Kg	4.50	ug/l	0.40	Kg	1.00	SM3113B	ML: 1.0 ug/l
Selenium	1.30	ug/l	0.10	Kg	1.30	ug/l	0.10	Kg	1.00	SM3113B	ML: 2.0 ug/l
Silver	2.30	ug/l	0.20	Kg	2.30	ug/l	0.20	Kg	1.00	SM3113B	ML: 0.50 ug/l
Thallium	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	SM3113B	ML: 2.0 ug/l
Zinc	100.00	ug/l	9.20	Kg	100.0	ug/l	9.20	Kg	1.00	SM3113B	ML: 10 ug/l
Cyanide	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 335.2	ML: 5.0 ug/l
Total Phenolic	0.00		0.00		0.00		0.00		0.00	ii .	
Compounds Hardness (As CaCO3)	0.00		0.00		0.00		0.00		0.00		

FACILITY NAME AND PERMIT NUMBER: Honouliuli WWTP Permit #HI0020877

Outfall Number	SERIA	L NO. (001								
POLLUTANT	N	MAXIMU	M DAILY		AV	ERAGE	DAILY	DISCHA	RGE	ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC CO	Action of the second										
Acrolein	1.70	ug/l	0.20	Kg	1.70	ug/l	0.20	Kg	1.00	EPA 603	ML: 1.0 ug/l
Acrylonitrile	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 603	ML: 1.0 ug/l
Benzene	0.30	ug/l	0.03	Kg	0.30	ug/l	0.03	Kg	1.00	EPA 624	ML: 2.0 ug/l
Bromoform	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
Carbon Tetrachloride	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
Clorobenzene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
Chlorodibromo-Methane	0.00		0.00		0.00		0.00		0.00		
Chloroethane	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
2-Chloro-Ethylvinyl	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2,0 ug/l
Ether ChloroForm	0.60	ug/l	0.06	Kg	0.60	ug/l	0.06	Kg	1.00	EPA 624	ML: 2.0 ug/l
Dichlorobromo-Methane	0.00		0.00		0.00		0.00		0.00		
1, 1-Dichloroethane	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
1, 2-Dichloroethane	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
Trans-1, 2-Dichloro-Ethylene	0.00		0.00		0.00		0.00		0.00		
1, 1-Dichloroethylene	0.00		0.00		0.00		0.00		0.00		
1, 2-Dichloropropane	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
1, 3-Dichloro-Propylene	0.00		0.00		0.00		0.00		0.00		
Ethylbenzene	0.50	ug/l	0.05	Kg	0.50	ug/l	0.05	Kg	1.00	EPA 624	ML: 2.0 ug/l
Methyl Bromide	0.00		0.00		0.00		0.00		0.00		
Methyl Chloride	0.00		0.00		0.00		0.00		0.00		
Methylene Chloride	0.70	ug/l	0.06	Kg	0.70	ug/l	0.06	Kg	1.00	EPA 624	ML: 2.0 ug/l
1, 1, 2, 2-Tetrachloro-Ethane Tetrachloro-Ethylene	0.00	ND	0.00		0.00		0.00	ND	1.00 0.00	EPA 624	ML: 2.0 ug/l
Toluene	2.00	ug/l			2.00			Kg	1.00	EPA 624	ML: 2.0

CILITY NAME AND PERMIT CONOULIULI WWTP F			2087	7					lication form nerated by P.		proved 1/14/99 mber 2040-0086
1, 1, 1-Trichloroethane	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
, 1, 2-Trichloroethane	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
inyl Chloride	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 ug/l
Outfall Number	SERIA	L NO.	001								
POLLUTANT	N	the state of the s	M DAILY		AV	ERAGE	DAILY	DISCHA	RGE	ANALYTICAL METHOD	ML/MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
CID-EXTRACTABLE	COMPO	UNDS									
P-Chloro-M-Cresol	0.00		0.00		0.00		0.00		0.00		
2-Chlorophenol	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
2, 4-Dichlorophenol	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l

0.00

0.00

0.00

0.00

0.00

ND

ND

ND

ND

4.00 UG/L

0.00 ND

0.00

0.00

0.00

0.00

0.40

0.00

0.00 ND

ND

ND

ND

KG

ND

0.00

1.00

1.00

1.00

1.00

1.00

1.00

EPA 625

EPA 625

EPA 625

EPA 625

EPA 625

EPA 625

ML: 26 ug/l

ML: 11 ug/l

ML: 26 ug/l

ML: 26 ug/l

ML: 11 ug/l

ML: 11 ug/l

2, 4, 6-Trichlorophenol	0.00	ND	0.00
	34		
Outfall Number	SERIA	L NO. C	001

0.00

0.00

0.00

0.00

0.00

4.00

ND

ND

ND

ND

UG/L

4, 6-Dinitro-O-Cresol

2, 4-Dinitrophenol

2-Nitrophenol

4-Nitrophenol

Phenol

Pentachlorophenol

0.00

0.00

0.00

0.00

0.00

0.40

ND

ND

ND

ND

KG

ND

POLLUTANT	N	DISCH	M DAILY ARGE		AV	ERAGE	DAILY	JISCHA	RGE	ANALYTICAL METHOD	ML/MDL
Conc	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
BASE-NEUTRAL COMP	OUNDS										
Acenaphthene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
Acenaphthylene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
Anthracene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
Benzidine	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 51 ug/l
Benzo(A)Anthracene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
3, 4 Benzo-Fluoranthene	0.00	11	0.00		0.00		0.00		0.00	2	

Benzo(GHI)Perylene Bis (2-Chloroethoxy) Methane	0.00	ND	0.00	NID							
	0.00			ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ·
		ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 51 u _b
Bis (2-Chloroethyl)-Ether	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/
Bis (2-Chloroiso-Propyl)	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/
Bis (2-Ethylhexyl) Phthalate	7.00	ug/l	0.60	Kg	7.00	ug/l	0.60	Kg	1.00	EPA 625	ML: 11 ug
4-Bromophenyl Phenyl Ether	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug
Etner Butyl Benzyl Phthalate	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug
2-Chloronaphthalene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug
-Chlorophenyl Phenyl	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug
Ether Di-N-Butyl Phthalate	0.00	ND	0.00	ND	0.00	ND	0.00	ŅD	1.00	EPA 625	ML: 11 ug
Di-N-Octyl Phthalate	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug
Dibenzo(A,H)Anthracene	0.00	ND	0.00	ND	0.00	ND	0.00	ŅD	1.00	EPA 625	ML: 11 ug
, 2-Dichlorobenzene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 u
1, 3-Dichlorobenzene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 624	ML: 2.0 u
, 4-Dichlorobenzene	2.10	ug/l	0.20	Kg	2.10	ug/l	0.20	Kg	1.00	EPA 624	ML: 2.5
3, 3-Dichlorobenzene	0.00		0.00		0.00		0.00		0.00		
Diethyl Phthalate	4.00	ug/l	0.40	Kg	4.00	ug/l	0.40	Kg	1.00	EPA 625	ML: 11 u
Dimethyl Phthalate	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 u
2, 4-Dinitrotoluene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 u
2, 6-Dinitrotoluene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 m
Fluoranthene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 u
Fluorene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 u
Hexachlorobenzene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 u
Hexachlorobutadiene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 51 u
HexachlorocycloPentadie	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 u
ne Hexachloroethane	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 u
Indeno(1, 2, 3-CK)Pyrene	0.00		0.00		0.00		0.00		0.00		
Isophorone	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 51 "

CILITY NAME AND PERMIT N			00208	377					ication form terated by P.		proved 1/14/99 umber 2040-0086
Naphthalene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 51 ug/l
Nitrobenzene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
N-Nitrosodi-N-Propylami ne	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
Phenanthrene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
Pyrene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 11 ug/l
1, 2, 4-Trichlorobenzene	0.00	ND	0.00	ND	0.00	ND	0.00	ND	1.00	EPA 625	ML: 51 ug/l

This permit application form was eletronically generated by P.A.S.S.

Form Approved 1/14/99 OMB Number 2040-0086

END OF PART D. REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM YOU MUST COMPLETE

Honouliuli Regional Wastewater Treatment Plant - Permit NO. HI 0020877

PART E. TOXICITY TESTING DATA

Individual test data: Tripneustes gratilla Fertilization Test

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HONOULIULI WASTEWATER TREATMENT FACILITY NPDES PERMIT NO. HI0020877

FORM 2A SUPPLEMENTAL APPLICATION INFORMATION: PART E. TOXICITY TESTING DATA.

- E.1. REQUIRED TESTS.

 See following attached sheets.
- E.2. INDIVIDUAL TEST DATA. See following attached sheets.
- E.3. TOXICITY REDUCTION EVALUATION. See following attached sheets.
- E.4. SUMMARY OF SUBMITTED BIOMONITORING TEST INFORMATION.

 As required by the Honouliuli WWTP NPDES permit, biomonitoring testing information is submitted to the U.S. Environmental Protection Agency and Hawaii Department of Health as a part of the monthly Discharge Monitoring Report (28th of each following month) and the Annual Assessment Report (30th of each June). Whole Effluent Test (WET) and Toxicity Identification Evaluation (TIE) submittals, for the past four and one-half years, are summarized by each year as follows:

2004: May 7, 2004 WET (*Tripneustes gratilla*) testing indicated the presence of toxicity exceeding the NPDES permit compliance value. A series of following weekly tests did not show any further toxicity that was persistent in the effluent.

2003: September 6, 2002 WET (*Tripneustes gratilla*) testing indicated the presence of toxicity exceeding the NPDES permit compliance value. Intermittent toxicity was observed in the following weekly samples. TIE manipulations indicated that the toxicants were associated with particulate material and were partly organic in nature. The weekly testing on effluent sampled from July 3, 2003 through August 3, 2003 showed no continuing toxicity. Monthly monitoring was subsequently resumed.

2002: March 2, 2002 WET (*Tripneustes gratilla*) testing indicated the presence of toxicity exceeding NPDES permit compliance value. The following accelerated testing showed intermittent toxic events. Toxicity was not detected in the weekly samples collected from May 9, 2002 to June 13, 2002. Subsequently, monthly WET monitoring was resumed.

2001 and 2000: During these years, WET (Tripneustes gratilla and Ceriodaphnia dubia) testings were in compliance with the permit value.

1999 4 near millers 1. 158.7 or 159 -> 159.7 is feinit

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FACILITY NAME AND PERMIT NUMBER:

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 0020877

Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

E.1. Required Tests.

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

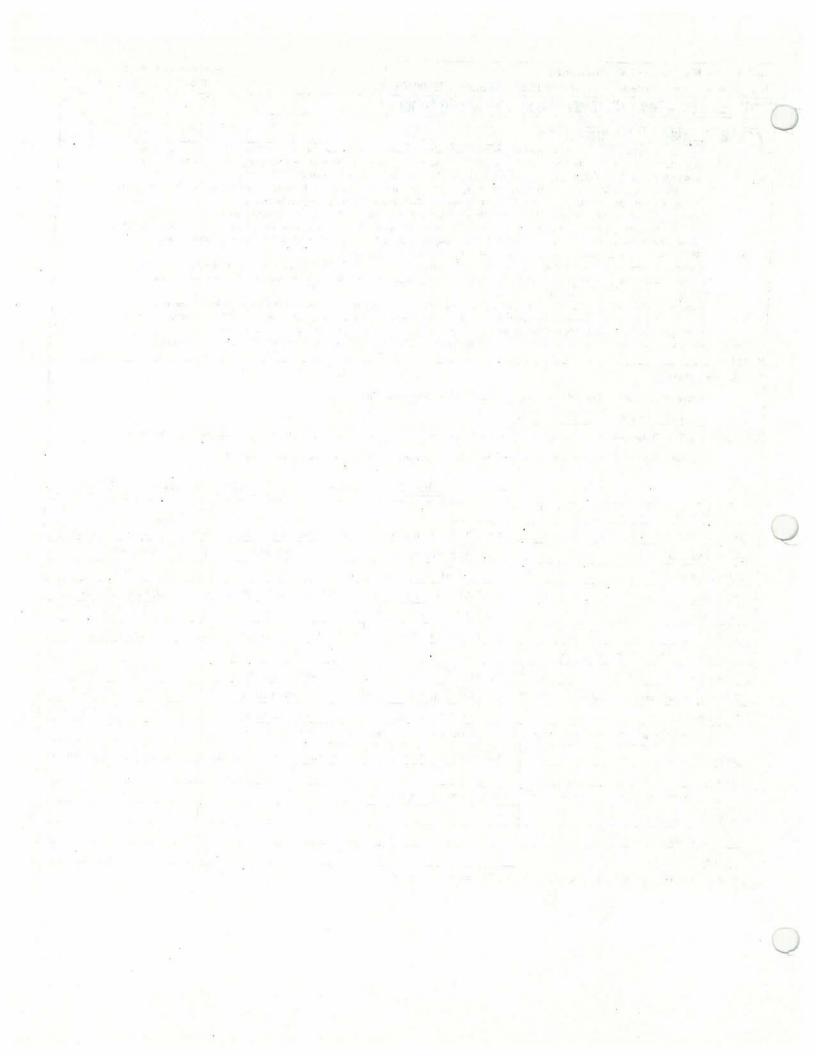
- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate
- QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

f d	Test number: HO012300	Test number: HO021200	Test number: HO031200
a. Test information.			
Fest species & test method number	T. gratilla (draft method)	T. gratilla (draft method)	T. gratilla (draft method)
Age at initiation of test	Not applicable	Not applicable	Not applicable
Outfall number	001	001	001
Dates sample collected	01/22/00 - 01/23/00	02/11/00 -02/12/00	03/11/00 -03/12/00
Date test started	01/23/00	02/12/00	03/12/00
Duration	1 hour 20 minutes	1 hour 20 minutes	1 hour 20 minutes
b. Give toxicity test methods followed.			
Manual title	Not applicable	Not applicable	Not applicable
Edition number and year of publication	Not applicable	Not applicable	Not applicable
Page number(s)	Not applicable	Not applicable	Not applicable
	ised. For multiple grab samples, indicate the	e number of grab samples used.	4
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composi
Grab			
d. Indicate where the sample was taken	in relation to disinfection. (Check all that ap	ply for each)	-
Before disinfection			
After disinfection		*	
After dechlorination			

EPA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22.



FACILITY NAME AND PERMIT NUMBER:

Honouliuli Regional Wastewater Treatment Plant - Permit No.HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

	Test number:	HO012300	Test number:	HO021200	Test number:	HO031200
e. Describe the point in the treatment prod	ess at which the sample	e was collected.				
ample was collected:	Downstream from a	ll plant additions	Downstream from	all plant additions	Downstream from	all plant additions
f. For each test, include whether the test	was intended to assess	chronic toxicity, acut	e toxicity, or both		<u> </u>	
hronic toxicity	::=			-		~
cute toxicity						
g. Provide the type of test performed.	1				11	
tatic		-		V	le a	~
Static-renewal					W 15.	7
Flow-through .	<u> </u>				FOR an I was	407 1407
h. Source of dilution water. If laboratory	water, specify type; if re	ceiving water, specif	y source.			
Laboratory water	- V	p)				
Receiving water	se	awater	se	eawater	s	eawater
i. Type of dilution water. It salt water, sp	ecify "natural" or type of	artificial sea salts or	brine used.			
Fresh water						
Salt water	1	natural	1	natural		natural
j. Give the percentage effluent used for	all concentrations in the	test series.			7	ex.
		0.00		0.00		0.00
		0.16		0.16		0.16
		0.32		0.32		0.32
		0.63		0.63		0.63
		1.26		1.26		1.26
•		2.52		2.52		2.52
k. Parameters measured during the tes	st. (State whether param		nod specifications	Age of the second		C. S. S.
рН		Yes		Yes		Yes
Salinity		Yes		Yes		Yes
Temperature	•	Yes		Yes		Yes .
Ammonia	No	measured	- No	t measured	No	ot measured
Dissolved oxygen		Yes		Yes		Yes
I. Test Results.					22	
Acute:						
Percent survival in 100%					923.00	
effluent			%		%	
LC50	ne:		%		%	
95% C.I.			%		%	
Control percent survival			%	t V	%	
Other (describe)						

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No.HI0020877 HO012300 Test number: HO021200 HO031200 Test number: Test number: Chronic: NOEC REPRODUCTION 2.52 % 0.63 % 2.52 % IC25 % % % Control percent survival % % % Other (describe) NOEC SURVIVAL % % % m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes acceptable bounds? Yes Yes What date was reference toxicant test run 01/23/00 (MM/DD/YYYY)? 02/12/00 03/12/00 Other (describe) E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

EPA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22.

If yes, describe:

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO061300 Test number: HO041800 Test number: HO051300 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 100 001 001 Outfall number 04/17/00 - 04/18/00 05/12/00 - 05/13/00 06/12/00 -06/13/00 Dates sample collected 04/18/00 05/13/00 06/13/00 Date test started 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite **Automatic Flow Composite** 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: stream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00

CILITY NAME AND PERMIT NUMBER: nouliuli Regional Wastewater Treatment Plant - Permit N	No. HI 00208077			orm Approved 1/14/99 OMB Number 2040-0086	
k. Parameters measured during the test. (State whether parame	Test number: HO041800	Test number:	HO051300	Test number: HO06130	0
Н	Yes	4.	Yes	Yes	
Salinity	Yes		Yes	Yes	5
Temperature -	Yes		Yes	Yes	
Ammonia	Not measured	Not	measured	Not measured	77
Dissolved oxygen	Yes		Yes	Yes	
I. Test Results.					
Acute:					
Percent survival in 100% effluent	%		%		0
LC50	%		%		
95% C.I.	%		%	and the same	
Control percent survival	%		%		
Other (describe)				920	
hronic:		Vien at	0.1		
NOEC REPRODUCTION	1.26 %	2	.52 %	0.63	
IC25	9/		%		
Control percent survival	9/		. %		
Other (describe) NOEC SURVIVAL	9		9	6	
m. Quality Control/Quality Assurance,					
Is reference toxicant data available?	Yes		Yes	Yes	¥0.
Was reference toxicant test within acceptable bounds?	Yes		Yes	Yes	
What date was reference toxicant test run (MM/DD/YYYY)?	04/18/00		05/13/00	06/13/00	
Other (describe)				1 1 1 1 1 1 1	
E.3. Toxicity Reduction Evaluation . Is the treatment works in		on?			

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

HO090200 Test number: HO071000 Test number: HO080500 Test number: a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 07/09/00 - 07/10/00 08/04/00 -08/05/00 09/01/00 - 09/02/00 Dates sample collected 07/10/00 08/05/00 09/02/00 Date test started 1 hour 20 minutes I hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.16 0.63 1.26

ouliuli Regional Wastewater Treatment Plant - Permit !	Massacra conservation (772182221922132
	Test number: HO071000	Test number: HO080500	Test number: HO090200
k. Parameters measured during the test. (State whether param			
о н	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured -	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.			
Acute:		3 N TO 10 NO.	A 150
Percent survival in 100% effluent		%	6
LC50		%	
95% C.I.		% 9	
Control percent survival			6
Other (describe)		-7-42	FILERX TIP
Chronic:			
NOEC REPRODUCTION	1.26	% 2.52	% 1.26
IC25			%
Control percent survival			%
Other (describe) NOEC SURVIVAL			%
m. Quality Control/Quality Assurance.	77	~	701
Is reference toxicant data available?	Yes	Yes.	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	07/10/00	08/05/00	09/02/00
Other (describe)	Unitardo	08/03/00	09/02/00
E.3. Toxicity Reduction Evaluation . Is the treatment works i	nvolved in a Toxicity Reduction Evalu	ation?	

Form Approved 1/14/99 OMB Number 2040-0086

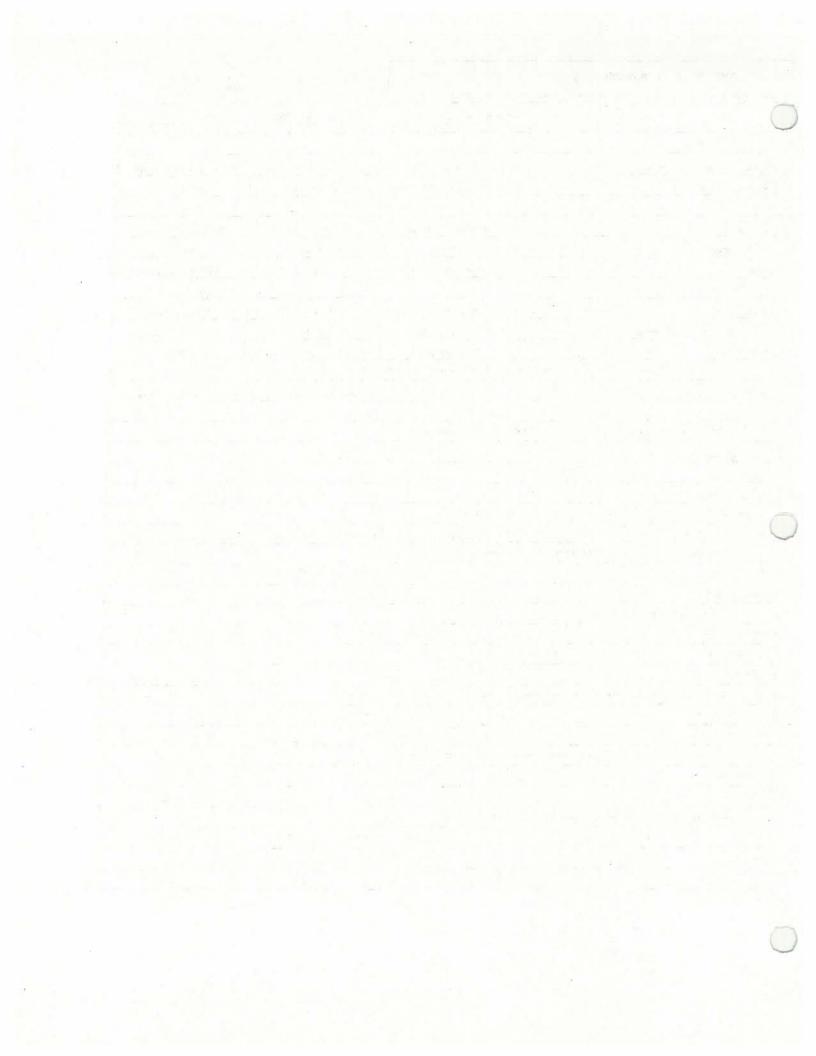
Test number: HO100800 Test number: HO111400 HO121400 Test number: a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 10/07/00 - 10/08/00 11/13/00 - 11/14/00 12/13/00 - 12/14/00 Dates sample collected 10/08/00 11/14/00 12/14/00 Date test started 1 hour 20 minutes 1 hour 20 minutes I hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable. Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater I. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series 0.00 0.00

ouliuli Regional Wastewater Treatment Plant - Permit !	Harris San		Towns of the		V02 727 025
I. D	Test number: HO100800	Test number	HO111400	Test number:	HO121400
k. Parameters measured during the test. (State whether param	T	ns)			
н	Yes		Yes	-	Yes
alinity	Yes		Yes		Yes
emperature	Yes		Yes		Yes
Ammonia	Not measured	No	ot measured		measured
Dissolved oxygen	Yes		Yes		Yes
I. Test Results.				6 FW	
Acute:				2.	
Percent survival in 100% effluent		%		%	
LC50		%		%	
95% C.I.		%		%	
Control percent survival	** *** *** ***	%		%	
Other (describe)		7.11			
nronic:					
NOEC REPRODUCTION	- 1.26	%	2.52	% ().	.63
IC25		%		%	
Control percent survival		%		%	4-4
Other (describe) NOEC SURVIVAL		%		%	7
m. Quality Control/Quality Assurance.					
Is reference toxicant data available?	Yes		Yes		Yes
Was reference toxicant test within acceptable bounds?	Yes		Yes		Yes
What date was reference toxicant test run (MM/DD/YYYY)?	10/08/00		11/14/00		12/14/00
Other (describe)	13,30,00				12/14/00

Test number: HO030201 Test number: HO010601 Test number: HO020501 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 03/01/01 -03/02/01 02/04/01 - 02/05/01 01/05/01 - 01/06/01 Dates sample collected 03/02/01 02/05/01 01/06/01 Date test started 1 hour 20 minutes I hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite **Automatic Flow Composite Automatic Flow Composite** 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Downstream from all plant additions Downstream from all plant additions Sample was collected: Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water seawater Receiving water seawater ı. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water natural natural Salt water natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0 16 0.32 0.32 1.26 2.52

	Test number: HO010601	Test number: HO020501	Test number: HO030201
k. Parameters measured during the test. (State whether parameters	eter meets test method specifications)		
н	Yes	Yes	Yes
alinity	Yes	Yes	Yes
emperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.		*	
Acute:			
Percent survival in 100% effluent	%	9/	
LC50	%	9/	
95% C.I.	%	9,	
Control percent survival	%	9,	
Other (describe)	100 - 1	un en	
hronic:			
NOEC REPRODUCTION	0.63 %	0.63	2.52
IC25	%		%
Control percent survival	%		%
Other (describe) NOEC SURVIVAL	%		%
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	01/06/01	02/05/01	03/02/01
Other (describe)		122 05/01	03/02/01
E.3. Toxicity Reduction Evaluation , is the treatment works isYes No if yes, describe:	nvolved in a Toxicity Reduction Evaluation	on?	

Test number: HO040701 Test number: HO050601 Test number: HO060601 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Age at initiation of test Not applicable 001 100 Outfall number 001 04/06/01 - 04/07/01 05/05/01 - 05/06/01 06/05/01 - 06/06/01 Dates sample collected Date test started 04/07/01 05/06/01 06/06/01 I hour 20 minutes 1 hour 20 minutes Duration 1 hour 20 minutes b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Not applicable Page number(s) Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00



	Test number: HO	040701	Test number:	HO050601	Test number:	HO060601
k. Parameters measured during the test. (State whether para	meter meets test method s	pecifications)				
100	Yes		Y	es		Yes
nity	Yes		Y	'es		Yes
nperature	Yes		1	/es		Yes
monia	Not measu	ured	Not m	neasured	Not	measured
solved oxygen	Yes		•	Yes		Yes
I. Test Results.						2
ute:						
Percent survival in 100% effluent		%		%		
LC50		%		9/		
95% C.I.	9 8	%		. 9	6	
Control percent survival		%		9	6	
Other (describe)						
onic:			V.			
NOEC REPRODUCTION	2.52	%	1.	26	/6 I	.26
IC25		%			%	
Control percent survival		%			%	
Other (describe) NOEC SURVIVAL		%			%	
m. Quality Control/Quality Assurance.				# #		
Is reference toxicant data available?	Ye	es		Yes		Yes
Was reference toxicant test within acceptable bounds?	Ye	es		Yes		Yes
What date was reference toxicant test run (MM/DD/YYYY)?	04/0	7/01		05/06/01		06/06/01 ·
		THE STATE OF THE S				

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Test number: HO080401 Test number: HO090801 Test number: HO070701 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 08/03/01 - 08/04/01 09/07/01 - 09/08/01 07/06/01 - 07/07/01 Dates sample collected 09/08/01 07/07/01 08/04/01 Date test started 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable. Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite **Automatic Flow Composite** Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. · Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural i. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00

2.52

2.52

2.52

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO080401 Test number: HO070701 Test number: HO090801 k. Parameters measured during the test. (State whether parameter meets test method specifications) pH Yes Yes Yes Salinity Yes Yes. Yes Temperature Yes Yes Yes Ammonia Not measured Not measured Not measured Dissolved oxygen Yes Yes Yes I. Test Results. Acute: Percent survival in 100% effluent % % % LC50 % % 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION % 1.26 2.52 2.52 % IC25 % % % Control percent survival % % % Other (describe) NOEC SURVIVAL % % m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within acceptable bounds? Yes Yes Yes What date was reference toxicant test run (MM/DD/YYYY)? 07/07/01 08/04/01 09/08/01 Other (describe) E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation?

FPA Form	3510-2A (Re	1-991	Penjarae	EDA form	- 7550 G	9 7550 22
LIATOIII	3310-2M (NO	V. 1-33).	Mahiares	CLY IOUI	5 1000-0	a 1000-22

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO101201 Test number: HO110301 Test number: HO121701 a. Test information. Test species & test method number T. gratilla (draft method) F. gratilla (draft method) T. gratilla (draft method) Not applicable Not applicable Age at initiation of test Not applicable 001 Outfall number 001 001 Dates sample collected 10/11/01 - 10/12/01 11/02/01 - 11/03/01 12/16/01 - 12/17/01 10/12/01 11/03/01 Date test started 12/17/01 1 hour 20 minutes 1 hour 20 minutes Duration 1 hour 20 minutes b. Give toxicity test methods followed. Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable. Not applicable Not applicable Page number(s) Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.63 0.63 0.63 2.52 2.52 2.52

ouliuli Regional Wastewater Treatment Plant - Permit N	No. HI 0020807	7					
		HO101201	Test number:	HO110301	Test number:	HO121701	
k. Parameters measured during the test. (State whether parameters	eter meets test me	thod specifications)					
		Yes		Yes		Yes	22
alinity	35 5 7	Yes		Yes		Yes	
emperature		Yes	v =====	Yes		Yes	
mmonia	Not i	neasured	Not i	neasured	Not r	measured	
issolved oxygen		Yes		Yes	1 1 1 1 1 1 1 1	Yes	
I. Test Results.		* * * * * * * * * * * * * * * * * * * *					
cute:		-	7.0				111
Percent survival in 100% effluent	1	%		%			•
LC50		%		%		-/	
95% C.I.		%		%			
Control percent survival		%	34	9			. 3
Other (describe)						1	
ronic:	72.0			-			
NOEC REPRODUCTION	1	.26 %	2	.52 %	6 1	.26	
IC25		9	6		6		1
Control percent survival		9	6		6		
Other (describe) NOEC SURVIVAL			6		%	i adi	
m. Quality Control/Quality Assurance.						- 1	
Is reference toxicant data available?		Yes		Yes		Yes	
Was reference toxicant test within acceptable bounds?		Yes		Yes		Yes	
		10/12/01		11/03/01		12/17/01	
What date was reference toxicant test run (MM/DD/YYYY)?							

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO012202 Test number: HO021602 Test number: HO030202 a. Test information. T. gratilla (draft method) T. gratilla (draft method) Test species & test method number T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable Outfall number 001 001 001 Dates sample collected 01/21/02 - 01/22/02 02/15/02 - 02/16/02 03/01/02 - 03/02/02 Date test started 01/22/02 02/16/02 03/02/02 1 hour 20 minutes 1 hour 20 minutes Duration 1 hour 20 minutes b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Page number(s) Not applicable Not applicable Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. 24-Hour composite Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: vnstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural I. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.00

FACILITY NAME AND PERMIT NUMBER: Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO030202 HO021602 Test number: HO012202 Test number: a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 03/01/02 - 03/02/02 02/15/02 - 02/16/02 01/21/02 - 01/22/02 Dates sample collected 03/02/02 02/16/02 01/22/02 Date test started 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection e. Describe the point in the treatment process at which the sample was collected. Downstream from all plant additions Downstream from all plant additions Sample was collected: Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water seawater Receiving water seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water natural natural Salt water natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.16

0.63

Form Approved 1/14/99 OMB Number 2040-0086

nouliuli Regional Wastewater Treatment Plant - Permit N	\$1034 Married Alexander		
k. Parameters measured during the test. (State whether param	Test number: HO012202 eter meets test method specifications)	Test number: HO021602	Test number: HO030202
н .	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen - ·	Yes	Yes	Yes
I. Test Results.			
Acute:			
Percent survival in 100% effluent	%	9	6
LC50	%	9	%
95% C.I.	%		%
Control percent survival	%		%
Other (describe)			
chronic:			
NOEC REPRODUCTION	1.26 %	2.52	% 0.32
IC25	%		%
Control percent survival	9/		%
Other (describe) NOEC SURVIVAL	9/	6	%
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	Yes	· Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	01/22/02	02/16/02	03/02/02
Other (describe)			
E.3. Toxicity Reduction Evaluation . Is the treatment works Yes No If yes, describe: Results from WET testing on o3/02/02 A series of accelerated tests was schedul	indicated presence of toxicity that	exceeded NPDES permit cor	mpliance value.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO030702 Test number: HO032602 Test number: HO040702 a. Test information. Test species & test method number T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable Outfall number 001 001 001 Dates sample collected 03/06/02 - 03/07/02 03/25/02 - 03/26/02 04/06/02 - 04/07/02 Date test started 03/07/02 03/26/02 04/07/02 Duration I hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) Not applicable Not applicable Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. 24-Hour composite Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.16 0.63

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO030702 Test number: HO032602 Test number: HO040702 k. Parameters measured during the test. (State whether parameter meets test method specifications) pH Yes Yes . Yes Salinity Yes Yes Yes Temperature Yes Yes Yes Ammonia Not measured Not measured Not measured Dissolved oxygen Yes Yes Yes I. Test Results. Percent survival in 100% % % % LC50 % % % 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION 0.32 % 1.26 % 0.16 % IC25 % % % Control percent survival % % % Other (describe) SURVIVAL NOEC % % m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within acceptable bounds? Yes Yes Yes What date was reference toxicant test run (MM/DD/YYYY)? 03/07/02 03/26/02 04/07/02 Other (describe) E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation? ___ No If yes, describe: Results from WET testing on o3/02/02 indicated presence of toxicity that exceeded NPDES permit compliance value.

Subsequent accelerated tests indicated intermittent toxic events.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO041802 Test number: HO042502 Test number: HO050302 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 Outfall number 001 04/17/02 - 04/18/02 04/24/02 - 04/25/02 05/02/02 - 05/03/02 Dates sample collected 04/18/02 04/25/02 05/03/02 Date test started Duration 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes b. Give toxicity test methods followed. Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Page number(s) Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite 24-Hour composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural J. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 2.52

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

	Test number: HO041802	Test number: HO042502	Test number: HO050302
k. Parameters measured during the test. (State whether parameters	meter meets test method specifications)		
pH	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	
LC50	%	%	
95% C.I.	. %	%	
Control percent survival	%	%	
Other (describe)			
Chronic:	7	An Arms	
NOEC REPRODUCTION	0.16 %	0.32 %	<0.16
IC25	%	%	6
Control percent survival	%	9/	6
Other (describe) NOEC SURVIVAL	%	9	6
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	04/18/02	04/25/02	05/03/02
Other (describe)			

E.3. Toxicity Reduction Evaluation	. Is the treatment works involved in a Toxicity Reduction Evaluation?

~	Yes	No	If yes.	describe

Results from WET testing on o3/02/02 indicated presence of toxicity that exceeded NPDES permit compliance value. Subsequent accelerated tests indicated intermittent toxic events. Toxicity Identification investigations based on the response of *Photobactereum phosphoreum* showed that toxicants were nonpolar in nature.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO051002 Test number: HO051602 Test number: HO052102 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 Outfall number 001 Dates sample collected 05/09/02 - 05/10/02 05/15/02 - 05/16/02 05/20/02 - 05/21/02 Date test started 05/10/02 05/16/02 05/21/02 1 hour 20 minutes I hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions stream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0,00 0,00 0.00 0.63 1.26 1.26 1.26 2.52

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether paramet	Test number: HO051002 er meets test method specifications)	Test number: HO051602	Test number: HO052102
рН	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.			
Acute:	* * 90		
Percent survival in 100% effluent	%	%	
LC50	%	%	9
95% C.I.	%	%	
Control percent survival	%	%	
Other (describe)			
Chronia:		Landa de la fina de la companya de l	
NOEC REPRODUCTION	0.63 %	0.63 %	0.63
IC25	%	%	9
Control percent survival	%	%	
Other (describe) NOEC SURVIVAL	. %	%	7
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	05/10/02	05/16/02	05/21/02
Other (describe)	1		

E.3. Toxicity Reduction Evaluation	. Is the treatment works involved in a	Toxicity Reduction Evaluation?

•	Yes	No	If ves.	describe

Results from WET testing on 03/02/02 indicated presence of toxicity that exceeded NPDES permit compliance value. This toxicity was not detected in samples collected weekly from 05/09/02 to 06/13/02. Monthly WET monitoring was subsequently resumed.

Form Approved 1/14/99 OMB Number 2040-0086

	Test number: HO053002	Test number: HO060502	Test number: HO061302
a. Test information.			
est species & test method number	T. gratilla (draft method)	T. gratilla (draft method)	T. gratilla (draft method)
Age at initiation of test	Not applicable	Not applicable	Not applicable
Outfall number	001	001	001
Dates sample collected	05/29/02 - 05/30/02	06/04/02 - 06/05/02	06/12/02 - 06/13/02
Date test started	05/30/02	06/05/02	06/13/02
Duration	1 hour 20 minutes	1 hour 20 minutes	1 hour 20 minutes
b. Give toxicity test methods followed.			
Manual title	Not applicable	Not applicable	Not applicable
Edition number and year of publication	Not applicable	Not applicable .	Not applicable
Page number(s)	Not applicable	Not applicable	Not applicable
	or multiple grab samples, indicate the number of grat	b samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab		L.L.	
d. Indicate where the sample was taken in relati	on to disinfection. (Check all that apply for each)		
Before disinfection			
After disinfection			
After dechlorination			
e. Describe the point in the treatment process a	at which the sample was collected.		
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition
f. For each test, include whether the test was in	ntended to assess chronic toxicity, acute toxicity, or b	ooth.	
Chronic toxicity	_		
Acute toxicity			
g. Provide the type of test performed.			
Static		-	-
Static-renewal	i i		
Flow-through			TOTAL
h. Source of dilution water. If laboratory water	, specify type; if receiving water, specify source.		A 40 Th
Laboratory water			-1 CH-1
Receiving water	seawater	seawater	seawater
i. Type of dilution water. It salt water, specify	"natural" or type of artificial sea salts or brine used.		
Fresh water			
Salt water	natural	natural	natural
j. Give the percentage effluent used for all co	incentrations in the test series.		-
	0,00	0.00	0.00
	0.32	0.32	0.32
	0.63 1.26	0.63	0.63
	2.52	2.52	2.52

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether parame	Test number: HO053002 Iter meets test method specifications)	Test number: HO060502	Test number: HO061302
рН	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes .	Yes
I, Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC50	%	%	%
95% C.I.	%	%	9/
Control percent survival	%	. %	9/
Other (describe)			
Chronic:			
NOEC REPRODUCTION	1.26 %	1.26 %	1.26
IC25	%	%	9
Control percent survival	. 9/6	9/	9
Other (describe) NOEC SURVIVAL	9/	9	6
m. Quality Control/Quality Assurance.			THE R. LEWIS CO., LANSING
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	05/30/02	06/05/02	06/13/02
Other (describe)			

E.3. Toxicity Reduction Evaluation	Is the treatment works involved in a	Toxicity Reduction Evaluation?

1				
٧	_Yes	No	If yes,	describe

Results from WET testing on 03/02/02 indicated presence of toxicity that exceeded NPDES permit compliance value. This toxicity was not detected in samples collected weekly from 05/09/02 to 06/13/02. Monthly WET monitoring was subsequently resumed.

Form Approved 1/14/99 OMB Number 2040-0086

	Test number: HO070802	Test number: HO080602	Test number: HO090602
a. Test information.		4	
Fest species & test method number .	T. gratilla (draft method)	T. gratilla (draft method)	T. gratilla (draft method)
Age at initiation of test	Not applicable	Not applicable	Not applicable
Outfall number	001	001	001
Dates sample collected	07/07/02 - 07/08/02	08/05/02 - 08/06/02	09/05/02 - 09/06/02
Date test started	07/08/02	08/06/02	09/06/02
Duration	1 hour 20 minutes	1 hour 20 minutes	1 hour 20 minutes
b. Give toxicity test methods followed.			
Manual title	Not applicable	Not applicable	Not applicable
Edition number and year of publication	Not applicable	Not applicable	Not applicable
Page number(s)	Not applicable	Not applicable	Not applicable
c. Give the sample collection method(s) used. For multiple	e grab samples, indicate the number of grat	o samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab		Contract Contract	
d. Indicate where the sample was taken in relation to disi	nfection. (Check all that apply for each)		
Before disinfection	- History		
After disinfection			
After dechlorination			
e. Describe the point in the treatment process at which to	he sample was collected.		All Mr.
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition
f. For each test, include whether the test was intended to	o assess chronic toxicity, acute toxicity, or b	oth.	
Chronic toxicity	-	-	-
Acute toxicity			
g. Provide the type of test performed.			A STATE OF THE STA
Static		-	-
Static-renewal -			
Flow-through	NOT THE RESERVE	CONTRACTOR OF STREET	
h. Source of dilution water. If laboratory water, specify t	ype; if receiving water, specify source.	The second second	
Laboratory water			A STATE OF THE STA
Receiving water	seawater	seawater	seawater
i. Type of dilution water. It salt water, specify "natural" of	or type of artificial sea salts or brine used.		
Fresh water			
Salt water	natural	natural	natural
j. Give the percentage effluent used for all concentration	ons in the test series.	TO STITLE D	THE PARTY OF THE P
	0.00	0.00	0.00
	0.00	1,000,000	537077
	0.00 0.16 0.32	0.16	0.16
	0.16	0.16	0.16 0.32 0.63 1.26

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO080602 Test number: HO090602 Test number: HO070802 k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH Salinity Yes Yes Yes Temperature Yes Yes Yes Not measured Ammonia Not measured Not measured Yes Yes Yes Dissolved oxygen I. Test Results. Acute: Percent survival in 100% effluent % % % LC50 % % % 95% C.I. % % % Control percent survival % % Other (describe) Chronic: NOEC REPRODUCTION 0.63 % 1.26 < 0.16 % % IC25 % % % Control percent survival % % % NOEC Other (describe) SURVIVAL % % % m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes Yes Yes acceptable bounds? What date was reference toxicant test run (MM/DD/YYY)? 07/08/02 08/06/02 09/06/02 E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation? __ No If yes, describe:

Results from WET testing on 09/06/02 indicated presence of toxicity that exceeded NPDES permit compliance value.

A series of accelerated tests was scheduled to determine persistence of toxicity.

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Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO091402 Test number: HO091902 Test number: HO092702 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 09/13/02 - 09/14/02 09/18/02 - 09/19/02 09/26/02 -09/27/02 Dates sample collected 09/14/02 09/19/02 . 09/27/02 Date test started 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. **Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite** 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.16 0.16 0.63 2 52 2.52

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k, Parameters measured during the test. (State whether param	Test number: HO091402 eter meets test method specifications)	Test number: HO091902	Test number: HO092702
рН	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.		Dir.	
Acute:			
Percent survival in 100% effluent	%	%	9,
LC50	%	%	9
95% C.I.	%	%	
Control percent survival	%	%	9
Other (describe)			
Chronic:			
NOEC REPRODUCTION	<0.16 %	<0.16 %	0.16
IC25	%	9	6
Control percent survival	9/	9	6
Other (describe) NOEC SURVIVAL	9/		/6
m. Quality Control/Quality Assurance.			The state of the s
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	09/14/02	09/19/02	09/27/02
Other (describe)			

E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ___ No If yes, describe:

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. The first three of the series of accelerated tests showed toxicity to T. gratilla gametes. TIE studies indicated that toxicity was organic in nature, associated with particulates, not associated with oxidants and cations like Pb or Cu. and not due to ammonia.

Test number: HO100202 Test number: HO100902 Test number: HO101602 a. Test information. Test species & test method number T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable 001 Outfall number 001 001 10/01/02 - 10/02/02 10/08/02 - 10/09/02 10/15/02 - 10/16/02 Dates sample collected 10/14/02 10/09/02 Date test started 10/16/02 1 hour 20 minutes 1 hour 20 minutes Duration 1 hour 20 minutes b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite 24-Hour composite **Automatic Flow Composite** Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural J. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.16 0.16 0.32 0.63 1.26 1 26 1 26

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether parame	Test number: HO100202 eter meets test method specifications)	Test number: HO100902	Test number: HO101602
рН	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.			The late of the late of the
Acute:			
Percent survival in 100% effluent	%	%	9
LC50	%	%	
95 % C.I.	* ** *** *** *** *** *** ***	%	No. of the second
Control percent survival	%	%	
Other (describe)			
Chronic: -	denga 1. b		and Williams
NOEC REPRODUCTION	1.26 %	1.26 %	1.26
IC25	9/	. 9	6
Control percent survival	9	9	6
Other (describe) NOEC SURVIVAL	9	6 u u u u e	6
m. Quality Control/Quality Assurance.			42 41 6
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	10/14/02	10/09/02	10/16/02
Other (describe)			

E.3. Toxicity	Reduction Evaluation	. Is the treatment works involved in a Toxicity Reduction Evaluation?

1				
-50	Yes	No	If VAS	describe

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. The first three of the series of accelerated tests showed toxicity to *T. gratilla* gametes but the subsequent five weekly effluent samples were not toxic.

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

The state of the same of the s	Test number: HO102302	Test number: HO103002	Test number: HO110402
a. Test information.	W IN THE STATE OF		
est species & test method number	T. gratilla (draft method)	T. gratilla (draft method)	T. gratilla (draft method)
Age at initiation of test	Not applicable	Not applicable	Not applicable
Outfall number	001	001	001
Dates sample collected	10/22/02 - 10/23/02	10/29/02 - 10/30/02	10/03/02 - 11/04/02
Date test started	10/23/02	10/30/02	11/04/02
Duration	1 hour 20 minutes	1 hour 20 minutes	1 hour 20 minutes
b. Give toxicity test methods followed.			
Manual title	Not applicable	Not applicable	. Not applicable
Edition number and year of publication	Not applicable	Not applicable	Not applicable
Page number(s)	Not applicable	Not applicable	Not applicable
c. Give the sample collection method(s) used. For multiple g	grab samples, indicate the number of gra	b samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab .		The state of the s	
d. Indicate where the sample was taken in relation to disinfe	ection. (Check all that apply for each)		
Before disinfection	La Real Land		
After disinfection		A CONTRACTOR OF THE PARTY OF TH	- Y-
After dechlorination		Tartes A H	
e. Describe the point in the treatment process at which the	sample was collected.	La territoria	
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition
f. For each test, include whether the test was intended to a	assess chronic toxicity, acute toxicity, or t	both.	
Chronic toxicity	-	-	-
Acute toxicity			all a literature per
g. Provide the type of test performed.			
Static	CONTRACTOR LANGE OF THE		Havis in the King of
Static-renewal		T. T. HUSAV A	
Flow-through .	AT THE MEDIT PLANT OF THE PARTY.		v. = styring v
h. Source of dilution water. If laboratory water, specify type	be; if receiving water, specify source.	All talk of the sec	ME TO THE REST
Laboratory water			
Receiving water	seawater	seawater	seawater
i. Type of dilution water. It salt water, specify "natural" or	type of artificial sea salts or brine used.		
Fresh water			
Salt water	natural	natural	natural
	is in the test series.	والمناب المراب والمامات	70 Na
j. Give the percentage effluent used for all concentration		0.00	0.00
j. Give the percentage effluent used for all concentration	0.00	0.00	1 1 1
j. Give the percentage effluent used for all concentration	0.00 0.16 0.32	0.00 0.16 0.32	0.16 0.32
j. Give the percentage effluent used for all concentration	0.16	0.16	0.16

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO110402 Test number: HO103002 Test number: HO102302 k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH Yes Yes Yes Salinity Yes Temperature Yes Yes Not measured Not measured Not measured Ammonia Dissolved oxygen Yes Yes Yes I. Test Results. Acute: Percent survival in 100% effluent % % % LC50 % % % 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION % 0.16 % 0.63 % 1.26 IC25 % % % Control percent survival % % % Other (describe) NOEC % SURVIVAL m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes Yes Yes acceptable bounds? What date was reference toxicant test run (MM/DD/YYYY)? 10/23/02 10/30/02 11/04/02 Other (describe) E.3. Toxicity Reduction Evaluation , is the treatment works involved in a Toxicity Reduction Evaluation? No If yes, describe: Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that toxicants were associated with particulate material and partly organic in nature.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO112602 Test number: HO111202 Test number: HO112102 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 11/20/02 - 11/21/02 11/25/02 - 11/26/02 11/11/02 - 11/12/02 Dates sample collected 11/21/02 11/26/02 Date test started 11/12/02 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite **Automatic Flow Composite** 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions stream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.16 0.32 1.26 1.26 1.26 2.52

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether parameter	Test number: HO111202 er meets test method specifications)	Test number: HO112102	Test number: HO112602
рН	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
i. Test Results.			
Acute:			
Percent survival in 100% effluent	%	. %	9
LC50	%	%	· ·
95% C.I.	%	%	
Control percent survival	%	%	
Other (describe)			
Chronic:			
NOEC REPRODUCTION	0.63 %	1.26 %	0.16
IC25	%	%	
Control percent survival	%	%	
Other (describe) . NOEC SURVIVAL	%	%	
m. Quality Control/Quality Assurance.			and a second
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	11/12/02	11/21/02	11/26/02
Other (describe)			

E 2 Taylolby Baduction Evaluation	to the treatment works involved in a Toyleit	Paduction Evaluation?
E.3. Toxicity Reduction Evaluation	. Is the treatment works involved in a Toxicity	y Reduction Evaluation?

1				
	Yes	No	If yes,	describe:

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that toxicants were associated with particulate material and partly organic in nature.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO121702 Test number: HO120302 Test number: HO121002 a. Test information. T. gratilla (draft method) T. gratilla (draft method) Test species & test method number T. gratilla (draft method) Not applicable Not applicable Not applicable Age at initiation of test 001 001 100 Outfall number 12/02/02 - 12/03/02 12/09/02 - 12/10/02 12/16/02 - 12/17/02 Dates sample collected 12/03/02 12/10/02 12/17/02 Date test started 1 hour 20 minutes 1 hour 20 minutes I hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0 00 0 00 0.32 0.32 1.26 1 26 1.26

Form Approved 1/14/99 FACILITY NAME AND PERMIT NUMBER: OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: 11O121702 Test number: HO120302 Test number: HO121002 k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH Yes Yes Yes Salinity Yes Yes Yes Temperature Not measured Not measured Not measured Ammonia Yes Yes Yes Dissolved oxygen I. Test Results. Acute: effluent Percent survival in 100% LC50 % % 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION 0.16 % 0.63 % 1.26 IC25 % % % Control percent survival % % % Other (describe) SURVIVAL NOEC % % m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes Yes Yes acceptable bounds? What date was reference toxicant test run (MM/DD/YYYY)? 12/17/02 12/10/02 12/03/02 Other (describe) E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation? __ No If yes, describe: Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit

compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that

toxicants were associated with particulate material and partly organic in nature.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO122302 Test number: HO123002 HO010603 Test number. a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number Dates sample collected 12/22/02 - 12/23/02 12/29/02 - 12/30/02 01/05/03 - 01/06/03 Date test started 12/23/02 12/30/02 01/06/03 1-hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: instream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water natural natural natural Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.00 2.52

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO010603 Test number: HO122302 Test number: HO123002 k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH Salinity Yes Yes Yes Temperature Yes Yes Yes Ammonia Not measured Not measured Not measured Yes Yes Yes Dissolved oxygen I. Test Results. Acute: Percent survival in 100% effluent % % LC50 % % 95% C.I. % % % Control percent survival % % Other (describe) Chronic: NOEC REPRODUCTION 1.26 % 0.63 0.32 % % IC25 % % % Control percent survival % % % NOEC Other (describe) % SURVIVAL m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within

E.3. Toxicity Reduction Evaluation .	Is the treatment works involved in a	Toxicity Reduction Evaluation?

1		774/4727	1440000000	TO A CONTROL OF THE C
100	Yes	No	If ves.	describe:

What date was reference toxicant test run (MM/DD/YYYY)?

acceptable bounds?

Other (describe)

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that toxicants were associated with particulate material and partly organic in nature.

Yes

12/23/02

Yes

12/30/02

Yes

01/06/03

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO011603 Test number: HO012303 Test number: HO012803 a. Test information. T. gratilla (draft method) Test species & test method number T. gratilla (draft method) T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable Outfall number 100 001 001 01/15/03 - 01/16/03 01/22/03 - 01/23/03 01/27/03 - 01/28/03 Dates sample collected 01/16/03 01/23/03 Date test started 01/28/03 1 hour 20 minutes 1 hour 20 minutes I hour 20 minutes Duration b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) Not applicable Not applicable Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite 24-Hour composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0,00 0.16 0.32 0.32 1.26 1.26 1.26

Form Approved 1/14/99 FACILITY NAME AND PERMIT NUMBER: OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO012803 Test number: HO011603 Test number: HO012303 k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH Yes Yes Yes Salinity Yes Yes Yes Temperature Not measured Not measured Not measured Ammonia Yes Yes Yes Dissolved oxygen I. Test Results. Acute: Percent survival in 100% effluent % % LC50 % % % 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION % 0.16 % 0.63 % 0.63 IC25 % % % Control percent survival % % % NOEC Other (describe) SURVIVAL % % m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes Yes Yes acceptable bounds? What date was reference toxicant test run (MM/DD/YYYY)? 01/28/03 01/16/03 01/23/03 Other (describe)

E.3. Toxicity Reduction Evaluation .	is the treatment works involved in a Toxicity Reduction Evaluation?
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1	2000	224040000		
	Yes	No	If yes,	describe:

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that toxicants were associated with particulate material and partly organic in nature.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO020303 Test number: HO021003 Test number: HO022103 a. Test information. Test species & test method number T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable 001 Outfall number 001 001 Dates sample collected 02/02/03 - 02/03/03 02/09/03 -02/10/03 02/20/03 -02/21/03 Date test started 02/03/03 02/10/03 02/21/03 I hour 20 minutes Duration 1 hour 20 minutes 1 hour 20 minutes b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) Not applicable Not applicable Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. 24-Hour composite Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.16 0.63 0.63 2.52

Form Approved 1/14/99 OMB Number 2040-0086 FACILITY NAME AND PERMIT NUMBER:

nouliuli Regional Wastewater Treatment Plant - Permit N	Test number: HO020303	Test number: HO021003	Test number: HO022103
k. Parameters measured during the test. (State whether parame	and the same of th	rest number. 110021005	
	Yes	Yes	Yes
pH ·	Yes	Yes	Yes
Salinity	1050		Yes
Temperature	Yes	Yes	
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	9
LC50	%	%	
95% C.I.	%	%	
Control percent survival	%	%	
Other (describe)			
Chronic:			
NOEC REPRODUCTION	0.63 %	0.16	0.63
IC25	9/	. 9	6
Control percent survival	9/		6
Other (describe) NOEC SURVIVAL	9	6	%
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	02/03/03	02/10/03	02/21/03
Other (describe)			

E.3. Toxicity Reduction Evaluation	. Is the treatment works involved in a Toxicity Reduction Evaluation?
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./				are continuous and
✓	Yes	No	If ves	describe

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that toxicants were associated with particulate material and partly organic in nature.

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO022503 Test number: HO030303 Test number: HO031203 a. Test information. Test species & test method number T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable Outfall number 001 001 001 Dates sample collected 02/24/03 - 02/25/03 03/02/03 - 03/03/03 03/11/03 - 03/12/03 Date test started 02/25/03 03/03/03 03/12/03 Duration 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) Not applicable Not applicable Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. 24-Hour composite Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection e. Describe the point in the treatment process at which the sample was collected. Sample was collected: enstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.32 0.63 1.26 2.52

Form Approved 1/14/99 FACILITY NAME AND PERMIT NUMBER: OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 HO030303 Test number: HO031203 Test number: HO022503 Test number: k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH Yes Yes Yes Salinity Yes Yes Yes Temperature Not measured Not measured Not measured Ammonia Yes Yes Yes Dissolved oxygen I. Test Results. Acute: % effluent Percent survival in 100% % % LC50 % % 95% C.I. % % % Control percent survival Other (describe) Chronic: 1.26 0.32 % NOEC REPRODUCTION 0.16 % % % % % % Control percent survival % NOEC Other (describe) % % SURVIVAL m. Quality Control/Quality Assurance. Yes Is reference toxicant data available? Yes Yes Was reference toxicant test within Yes Yes Yes acceptable bounds? What date was reference toxicant test run (MM/DD/YYYY)? 03/12/03 03/03/03 02/25/03 Other (describe) E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation? No If yes, describe:

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that

toxicants were associated with particulate material and partly organic in nature.

 F	2510 24	/Day	1-001	Penlares	FPA	forms	7550-6 &	7550-22.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO031803 HO032703 Test number: Test number: HO033103 a. Test information. T. gratilla (draft method) Test species & test method number T. gratilla (draft method) T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable 001 Outfall number 001 001 Dates sample collected 03/17/03 - 03/18/03 03/26/03 - 03/27/03 03/30/03 - 03/31/03 Date test started 03/18/03 03/27/03 03/31/03 Duration I hour 20 minutes 1 hour 20 minutes I hour 20 minutes b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) Not applicable Not applicable Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. 24-Hour composite Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: vnstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.16 0.63 0.63

CILITY NAME AND PERMIT NUMBER: nouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077		Form Approved 1/14/99 OMB Number 2040-0086		
Test number: HO031803	Test number: HO032703	Test number: HO033103		
Yes	Yes	Yes		
Yes	Yes	Yes		
Yes	Yes	Yes '		
Not measured	Not measured	Not measured		
Yes	Yes	Yes		
		Awar , He lack		
	% . 9	%		
	% 9	6 %		
e sant come en out	% 9	6 %		
3	%	% %		

4	Control of the control of the second			
1.26	% 0.63	% 0.63 %		
	%	%		
II T	%	%		
	%	%		
•		4.27		
Yes	Yes	Yes		
Yes	. Yes	Yes		
03/18/03	03/27/03	03/31/03		
	- /			
	Yes Yes Yes Not measured Yes 1.26	Yes		

Form Approved 1/14/99 OMB Number 2040-0086

	. Test number: HO040703	Test number: HO041603	Test number: HO042503
a. Test information.		-	
est species & test method number	T. gratilla (draft method)	T. gratilla (draft method)	T. gratilla (draft method)
Age at initiation of test	Not applicable	Not applicable	Not applicable
Dutfall number	001	001	001
Dates sample collected	04/06/06 - 04/07/03	04/15/03 - 04/16/03	04/24/03 - 04/25/03
Date test started	04/07/03	04/16/03	04/25/03
Duration	I hour 20 minutes	I hour 20 minutes	1 hour 20 minutes
b. Give toxicity test methods followed.			
Manual title	Not applicable	Not applicable	Not applicable
Edition number and year of publication	Not applicable	Not applicable	Not applicable
Page number(s)	Not applicable	. Not applicable	Not applicable
c. Give the sample collection method(s) used. For multiple	grab samples, indicate the number of gral	b samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab			3111
d. Indicate where the sample was taken in relation to disin	fection. (Check all that apply for each)		
Before disinfection	1 Ju	27 -	1 15 6 7 16
After disinfection			
After dechlorination			
e. Describe the point in the treatment process at which the	e sample was collected.		N. O
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition
f. For each test, include whether the test was intended to		200	MANAGEMENT OF THE
Chronic toxicity	-	_	-
Acute toxicity		70(10)	Tray and the same
g. Provide the type of test performed.			j=-
Static	I managed a	-	N. D
Static-renewal		le a la la	
Flow-through	THE RELEASE THE PARTY.	and the second	A Maria and a second
h. Source of dilution water. If laboratory water, specify ty	pe; if receiving water, specify source.	to be the term of the	er was that pe
Laboratory water			
Receiving water	seawater	seawater	seawater
i. Type of dilution water. It salt water, specify "natural" or			
Fresh water			
Fresh water Salt water	natural	natural	natural
		natural	natural
Salt water	ns in the test series,	0.00	0.00
Salt water	0,00 0,16	0.00	0.00
Salt water	ns in the test series,	0.00	0.00

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO041603 Test number: HO042503 Test number: HO040703 k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH Yes Yes Yes Salinity Yes Yes Yes Temperature Not measured Not measured Not measured Ammonia Yes Yes Yes Dissolved oxygen I. Test Results. Acute: Percent survival in 100% effluent % % LC50 % % % 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION 0.63 % < 0.16 1.26 % IC25 % % Control percent survival % % % Other (describe) NOEC % % % SURVIVAL m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes Yes Yes acceptable bounds? What date was reference toxicant test run (MM/DD/YYYY)? 04/07/03 04/16/03 04/25/03 Other (describe) E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation? __ No If yes, describe: Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit

compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that

toxicants were associated with particulate material and partly organic in nature.

EPA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO050203 Test number: HO051003 Test number: HO051303 a. Test information. T. gratilla (draft method) Test species & test method number T. gratilla (draft method) T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable 001 001 001 Outfall number 05/01/03 - 05/02/03 05/09/03 - 05/10/03 Dates sample collected 05/12/03 - 05/13/03 05/02/03 05/10/03 Date test started 05/13/03 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite 24-Hour composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions instream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series.

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether parameter		Test number: HO051003	Test number: HO051303
pH	Yes	Yes	Yes
Sallnity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
i. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	0
LC50 .	% %		
95% C.I.	%	%	A STATE OF THE STA
Control percent survival	%	%	
Other (describe)			
Chronic:			
NOEC REPRODUCTION	<0.16 %	<0.16 %	1.26
1C25	%	%	
Control percent survival	. %	%	
Other (describe) NOEC SURVIVAL	%	%	
m. Quality Control/Quality Assurance.			1004
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	05/02/03	05/10/03	. 05/13/03
Other (describe)			and the same of th

E.3. Toxicity Reduction Evaluation	I. Is the treatment works involved in a	Toxicity Reduction Evaluation?
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Yes	No	If yes,	describe:
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Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that toxicants were associated with particulate material and partly organic in nature.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO052103 Test number: HO052803 Test number: HO060603 a. Test information. Test species & test method number T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Age at initiation of test Not applicable Not applicable Not applicable Outfall number 001 001 001 Dates sample collected 05/20/03 - 05/21/03 05/27/03 - 05/28/03 06/05/03 - 06/06/03 Date test started 05/21/03 05/28/03 06/06/03 Duration 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) Not applicable Not applicable Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. 24-Hour composite Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions vnstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water, it salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.32 1.26 2.52

Form Approved 1/14/99 OMB Number 2040-0086

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

ouliuli Regional Wastewater Treatment Plant - Permit N	Test number: HO052103	Test number: HO052803	Test number: HO060603
k, Parameters measured during the test. (State whether parameter	Yes	Yes	Yes
H	The second secon	Yes	Yes
Salinity	Yes		Yes
Temperature	Yes	Yes	172000
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.		34	
Acute:		34	
Percent survival in 100% effluent	%	9	6 %
LC50	%	9	6 9
95% C.I.	%	The state of the s	% 9
Control percent survival	%		% 9
Other (describe)		\$1.00 B	
chronic:		K JA DECEMBER	AL ALIAN CONTRACTOR
NOEC REPRODUCTION	<0.16 %	< 0.16	% 0.32
IC25	9	6	%
Control percent survival	9	6	%
Other (describe) NOEC SURVIVAL		% HE HE HE	%
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	05/21/03	05/28/03	06/06/03
Other (describe)			transfer of the same of

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

1	Yes _	No	If yes.	describe:
	103		" , "	

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that toxicants were associated with particulate material and partly organic in nature.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO061003 Test number: HO061603 Test number: HO062203 a. Test information. Test species & test method number T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Not applicable Not applicable Age at initiation of test Not applicable Outfall number 001 001 001 06/09/03 - 06/10/03 06/15/03 - 06/16/03 Dates sample collected 06/21/03 - 16/22/03 06/10/03 Date test started 06/16/03 06/22/03 1 hour 20 minutes 1 hour 20 minutes Duration 1 hour 20 minutes b. Give toxicity test methods followed. Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) Not applicable Not applicable Not applicable c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. 24-Hour composite **Automatic Flow Composite** Automatic Flow Composite Automatic Flow Composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water scawater scawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.16 2.52

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether parame	Test number: HO061003 ter meets test method specifications)	Test number: HO061603	Test number: HO062203
рн	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	. Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.		+ 1	Marchael Nacional State
Acute:			
Percent survival in 100% effluent	%	%	en al-lace 2 days - Na the Strike to be the
LC50	%	%	n v
95% C.I.	%	- 1	
Control percent survival	%	777	
Other (describe)	The state of the s	R F =	
chronic:		si mer de como	and Indian all
NOEC REPRODUCTION	<0.16 %	0.63 %	0.16
IC25	%	94	
Control percent survival	94	90	
Other (describe) NOEC SURVIVAL	94	district the same of the same	payment di
m. Quality Control/Quality Assurance.			por Secretarians
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	06/10/03	06/16/03	06/22/03
Other (describe)	-		A State of the second

E.3. Toxicity Reduction Evaluation. is the treatment works involved in a Toxicity Reduction Evaluation?

-	_Yes	_ No	If yes,	describe:

Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. TIE manipulations indicated that toxicants were associated with particulate material and partiy organic in nature.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO071603 HO070403 Test number: HO071003 Test number. a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 07/09/03 - 07/04/03 07/15/03 - 07/16/03 07/03/03 - 07/04/03 Dates sample collected 07/16/03 07/04/03 07/10/03 Date test started I hour 20 minutes 1 hour 20 minutes I hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite **Automatic Flow Composite** Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions nstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.00 0.16 0.63 1.26 1.26

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether param	Test number: HO070403 neter meets test method specifications)	Test number: HO071003	Test number: HO071603
рН	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured .	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes .
i. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	9
LC50	%	%	
95% C.I.	%	%	
Control percent survival	%	%	
Other (describe)			the Control of the Co
Chronic:			
NOEC REPRODUCTION	0.63 %	1.26 %	2.52
IC25	. %	%	
Control percent survival	9/	%	The second second
Other (describe) NOEC SURVIVAL	9/	%	
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	07/04/03	07/10/03	07/16/03
Other (describe)			

E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ____ No __if yes, describe:
Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. However, samples collected from 07/03/03 to 08/03/03 for accelerated testing were not toxic to *T. gratilla* gametes. Monthly monitoring was subsequently resumed.

Form Approved 1/14/99 OMB Number 2040-0086

	Test number: HO072203	Test number: HO072803	Test number: HO080303
a. Test information.	at an analysis of		
est species & test method number	T. gratilla (draft method)	T. gratilla (draft method)	T. gratilla (draft method)
Age at initiation of test	Not applicable	Not applicable	Not applicable
Outfall number	001	001	001
Dates sample collected	07/21/03 - 07/22/03	07/27/03 - 07/28/03	08/02/03 - 08/03/03
Date test started	07/22/03	07/28/03	08/03/03
Duration	I hour 20 minutes	1 hour 20 minutes	1 hour 20 minutes
b. Give toxicity test methods followed.	and the second second		16 11
Manual title	Not applicable	Not applicable	Not applicable
Edition number and year of publication	Not applicable	Not applicable	Not applicable
Page number(s)	Not applicable	Not applicable	Not applicable
c. Give the sample collection method(s) used. For multiple			
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composit
Grab			
d. Indicate where the sample was taken in relation to dis	infection. (Check all that apply for each)		
Before disinfection			There is not to
After disinfection			
After dechlorination			Territoria de la
e. Describe the point in the treatment process at which	the sample was collected.		A Vo. Bingo
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition
f. For each test, include whether the test was intended t			OF FACE OF STATE
Chronic toxicity ·	-	-	-
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			Teles 3
Flow-through	and the same of	To Henry	ella a to a
h. Source of dilution water. If laboratory water, specify	type; if receiving water, specify source.	The state of the s	A SERVICE OF
Laboratory water			
Laboratory water			
Receiving water	seawater	seawater	seawater
		seawater	seawater
Receiving water		seawater	seawater
Receiving water i. Type of dilution water. It salt water, specify "natural"		seawater	seawater
Receiving water i. Type of dilution water. It salt water, specify "natural" Fresh water	or type of artificial sea salts or brine used. natural ons in the test series.		
Receiving water i. Type of dilution water. It salt water, specify "natural" Fresh water Salt water	or type of artificial sea salts or brine used. natural ons in the test series.	natural 0.00	natural 0.00
Receiving water i. Type of dilution water. It salt water, specify "natural" Fresh water Salt water	or type of artificial sea salts or brine used. natural ons in the test series.	natural	natural
Receiving water i. Type of dilution water. It salt water, specify "natural" Fresh water Salt water	or type of artificial sea salts or brine used. natural ons in the test series. 0,00 0.16	0.00 0.16	natural 0.00 0.16

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

	Test number: HO072203	Test number: HO072803	Test number: HO080303
k. Parameters measured during the test. (State whether param			
pH	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.			-
Acute:		****	
Percent survival in 100% effluent	%	. %	9
LC50	%	%	9
95% C.I.	%	%	THE PARTY OF THE PARTY OF
Control percent survival	%	%	
Other (describe)			
Chronic:	- T 1		water the second
NOEC REPRODUCTION	0.63 %	1.26 %	0.63
IC25	%	%	
Control percent survival	%	%	(4)X
Other (describe) NOEC SURVIVAL	%	9/	
m. Quality Control/Quality Assurance.			Day were mire
Is reference toxicant data available?	Yes	Yes Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes .	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	07/22/03	07/28/03	08/03/03
Other (describe)		The state of the s	

E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ____ No If yes, describe:
Results from WET testing on 09/06/02 showed presence of toxicity in the effluent that exceeded NPDES permit compliance value. Intermittent toxicity was observed in the subsequent weekly samples. However, samples collected from 07/03/03 to 08/03/03 for accelerated testing were not toxic to *T. gratilla* gametes. Monthly monitoring was subsequently resumed.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO090503 HO100203 HO110303 Test number: Test number: a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 09/04/03 - 09/05/03 10/01/03 - 10/02/03 Dates sample collected 11/02/03 - 11/03/03 09/05/03 Date test started 10/02/03 11/03/03 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. **Automatic Flow Composite** Automatic Flow Composite 24-Hour composite **Automatic Flow Composite** Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions nstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.32 1.26 1.26 1.26

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO090503 Test number: HO100203 Test number: HO110303 k. Parameters measured during the test. (State whether parameter meets test method specifications) pН Yes Yes Salinity Yes Yes Yes Yes Temperature Yes Yes Not measured Ammonia Not measured Not measured Dissolved oxygen Yes Yes Yes I. Test Results. Acute: Percent survival in 100% effluent % % % LC50 % % % 95% C.I. % % % Control percent survival % % Other (describe) Chronic: NOEC REPRODUCTION 0.63 % 0.63 % 1.26 % IC25 % % % Control percent survival % % % Other (describe) NOEC SURVIVAL % % m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within acceptable bounds? Yes Yes Yes What date was reference toxicant test run (MM/DD/YYYY)? 09/05/03 10/02/03 11/03/03 Other (describe) E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation?

EPA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22.

If yes, describe:

Form Approved 1/14/99 OMB Number 2040-0086

	Test number: HO120403	Test number: HO010704	Test number: HO020504
a. Test information,			
est species & test method number	T. gratilla (draft method)	T. gratilla (draft method)	T. gratilla (draft method)
Age at initiation of test	Not applicable	Not applicable	Not applicable
Outfall number	- 001	- 001	001
Dates sample collected	12/03/03 - 12/04/03	01/06/04 - 01/07/04	02/04/04 - 02/05/04
Date test started	12/04/03	01/07/04	02/05/04
Duration	1 hour 20 minutes	1 hour 20 minutes	1 hour 20 minutes
b. Give toxicity test methods followed.			24486, 50
Manual title	Not applicable	Not applicable	Not applicable
Edition number and year of publication	Not applicable	Not applicable	Not applicable
Page number(s)	Not applicable	Not applicable	Not applicable
c. Give the sample collection method(s) used. For	r multiple grab samples, indicate the number of grab	samples used.	7.5
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab d. Indicate where the sample was taken in relation	on to disinfaction. (Check all that apply for each)		
	In to distillection. (Check all that apply for each)		
Before disinfection			
After disinfection			
After dechlorination e. Describe the point in the treatment process at	which the sample was collected		
	which the sample was conecied.		
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition
	ended to assess chronic toxicity, acute toxicity, or be	T -	T -2
Chronic toxicity			-
Acute toxicity			
g. Provide the type of test performed.			
Static		4 2 2 4	
Static-renewal Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water,	specify type; if receiving water, specify source.	-	7
Laboratory water			
Receiving water	seawater	seawater	seawater
i. Type of dilution water. It salt water, specify "r	natural" or type of artificial sea salts or brine used.		
Fresh water			
Salt water	natural	natural	natural
j. Give the percentage effluent used for all con			ora <mark> </mark>
	0,00	0,00	0,00
		. 0.10	0.10
	0.16 0.32	0.32	0.32

FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077 Test number: HO120403 Test number: HO010704 Test number: HO020504 k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes pH Yes Yes Salinity Yes Yes Yes Yes Yes Yes Temperature Ammonia Not measured Not measured Not measured Dissolved oxygen Yes Yes Yes I. Test Results. Acute: Percent survival in 100% effluent % % LC50 % % % 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION % % 2.52 2.52 2.52 IC25 % % % Control percent survival % % % Other (describe) NOEC SURVIVAL % m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes Yes Yes acceptable bounds? What date was reference toxicant test run (MM/DD/YYYY)? 12/04/03 01/07/04 02/05/04 Other (describe) E.3. Toxicity Reduction Evaluation . Is the treatment works involved in a Toxicity Reduction Evaluation?

Form Approved 1/14/99 OMB Number 2040-0086

	Test number: HO030504	Test number: HO040604	Test number: HO050704
a. Test information.			
Fest species & test method number	T. gratilla (draft method)	T. gratilla (draft method)	T. gratilla (draft method)
Age at initiation of test	Not applicable	Not applicable	Not applicable
Outfall number	. 001	001	001
Dates sample collected	03/04/04 - 03/05/04	04/05/04 - 04/0604	05/06/04 - 05/07/04
Date test started	03/05/04	04/06/04	05/07/04
Duration	1 hour 20 minutes	1 hour 20 minutes	I hour 20 minutes
b. Give toxicity test methods followed.			
Manual title	Not applicable	Not applicable	Not applicable
Edition number and year of publication	Not applicable	Not applicable	Not applicable
Page number(s)	Not applicable	Not applicable	Not applicable
c. Give the sample collection method(s) used. For multiple		A CONTRACTOR OF THE CONTRACTOR	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab			
d. Indicate where the sample was taken in relation to dis-	infection. (Check all that apply for each)		
Before disinfection			
After disinfection	H. L.		
After dechlorination			
e. Describe the point in the treatment process at which t	he sample was collected.	A CONTRACTOR OF THE PARTY	
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant additio
f. For each test, include whether the test was intended t			
Chronic toxicity	~		
Acute toxicity	\$70,00		
g. Provide the type of test performed.			
Static	-		-
Static-renewal Static-renewal			
Flow-through	The Robert of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 (I. L
h. Source of dilution water. If laboratory water, specify	type; if receiving water, specify source.	S SHOW S CORE NO	
Laboratory water			
Receiving water	seawater	seawater	seawater
i. Type of dilution water. It salt water, specify "natural"			
Fresh water			
Salt water	natural	natural	natural
j. Give the percentage effluent used for all concentrate		- 100 m	and the second
	0 00	0,00	0.00
	0.16	0.16	0.16
	0.63 1.26	0.63	0.63

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether param	Test number: HO030504 eleter meets test method specifications)	Test number: HO040604	Test number: HO050704
pH	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.		100	ani ana ana ana
Acute;			
Percent survival in 100% effluent	%	%	9
LC50	%	%	
95% C.I.	%	%	
Control percent survival	%	%	
Other (describe)			
Chronic:		- 140W	
NOEC REPRODUCTION	2.52 %	2.52 %	2.52
IC25	%	%	
Control percent survival	%	%	
Other (describe) NOEC SURVIVAL	%	%	
m. Quality Control/Quality Assurance.			
Is reference toxicant data available?	· Yes	Yes A Person	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes
What date was reference toxicant test run (MM/DD/YYYY)?	03/05/04	04/06/04	05/07/04
Other (describe)		7.11.21.2.2	

E.3. Toxicity Reduction Evaluation . Is the	the treatment works involved in a Toxicity Reduction Evaluation?
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res No IT yes, describe	~	Yes	No	If yes.	describe
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Results from WET testing on 05/07/04 indicated presence of toxicity that exceeded NPDES permit compliance value. A series of accelerated tests was scheduled to determine persistence of toxicity.

Form Approved 1/14/99 OMB Number 2040-0086

Test number: HO051704 Test number: HO052304 Test number: HO051404 a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 05/13/04 - 05/14/04 05/16/04 - 05/17/04 05/22/04 - 05/23/04 Dates sample collected 05/14/04 05/17/04 05/23/04 Date test started 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite Automatic Flow Composite 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water Salt water natural natural natural j. Give the percentage effluent used for all concentrations in the test series. 0.00 0.00 0.16 0.63 1.26

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077

Form Approved 1/14/99 OMB Number 2040-0086

k. Parameters measured during the test. (State whether parameters	Test number: HO051404 neter meets test method specifications)	Test number: HO051704	Test number: HO052304	
рН	Yes	Yes	Yes	
Salinity	Yes	Yes	Yes	
Temperature	Yes	Yes	Yes	
Ammonia	Not measured	Not measured	Not measured	
Dissolved oxygen	Yes	Yes	Yes	
I. Test Results.			The state of the s	
Acute:				
Percent survival in 100% effluent	%	%	%	
LC50	. %	%	%	
95% C.I.	%	%	%	
Control percent survival	%	%	%	
Other (describe)				
Chronic:		The state of the s	The second second	
NOEC REPRODUCTION	2.52 %	2.52 . %	2.52 %	
IC25	9/6	9/	94	
Control percent survival	9/	9/	9/	
Other (describe) NOEC SURVIVAL	%		9/	
m. Quality Control/Quality Assurance.				
Is reference toxicant data available?	Yes	Yes	Yes	
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes	
What date was reference toxicant test run (MM/DD/YYYY)?	05/14/04	05/17/04	05/23/04	
Other (describe)				

E.3.	Toxicity Reduction Evalua	tion. Is the treatment works involved in a	a Toxicity Reduction Evaluation?
------	----------------------------------	--	----------------------------------

•	Yes	No	If ves	describe:

Results from WET testing on 05/07/04 indicated presence of toxicity that exceeded NPDES permit compliance value. A series of accelerated tests showed the absence of persistent toxicity in the effluent.

Honouliuli Regional Wastewater Treatment Plant - Permit No. HI 00208077.

Test number: HO061604 Test number: HO060204 HO061004 Test number: a. Test information. T. gratilla (draft method) T. gratilla (draft method) T. gratilla (draft method) Test species & test method number Not applicable Not applicable Not applicable Age at initiation of test 001 001 001 Outfall number 06/01/04 - 06/02/04 06/09/04 - 06/10/04 06/15/04 - 06/16/04 Dates sample collected 06/02/04 06/10/04 06/16/04 Date test started 1 hour 20 minutes 1 hour 20 minutes 1 hour 20 minutes Duration b. Give toxicity test methods followed. Not applicable Not applicable Not applicable Manual title Not applicable Not applicable Not applicable Edition number and year of publication Not applicable Not applicable Not applicable Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. Automatic Flow Composite Automatic Flow Composite **Automatic Flow Composite** 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection After dechlorination e. Describe the point in the treatment process at which the sample was collected. Sample was collected: Downstream from all plant additions Downstream from all plant additions Downstream from all plant additions f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. Chronic toxicity Acute toxicity g. Provide the type of test performed. Static Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source. Laboratory water Receiving water seawater seawater i. Type of dilution water. It salt water, specify "natural" or type of artificial sea salts or brine used. Fresh water natural natural natural j. Give the percentage effluent used for all concentrations in the test series 0.00 0.00 0.32 0.63 1.26

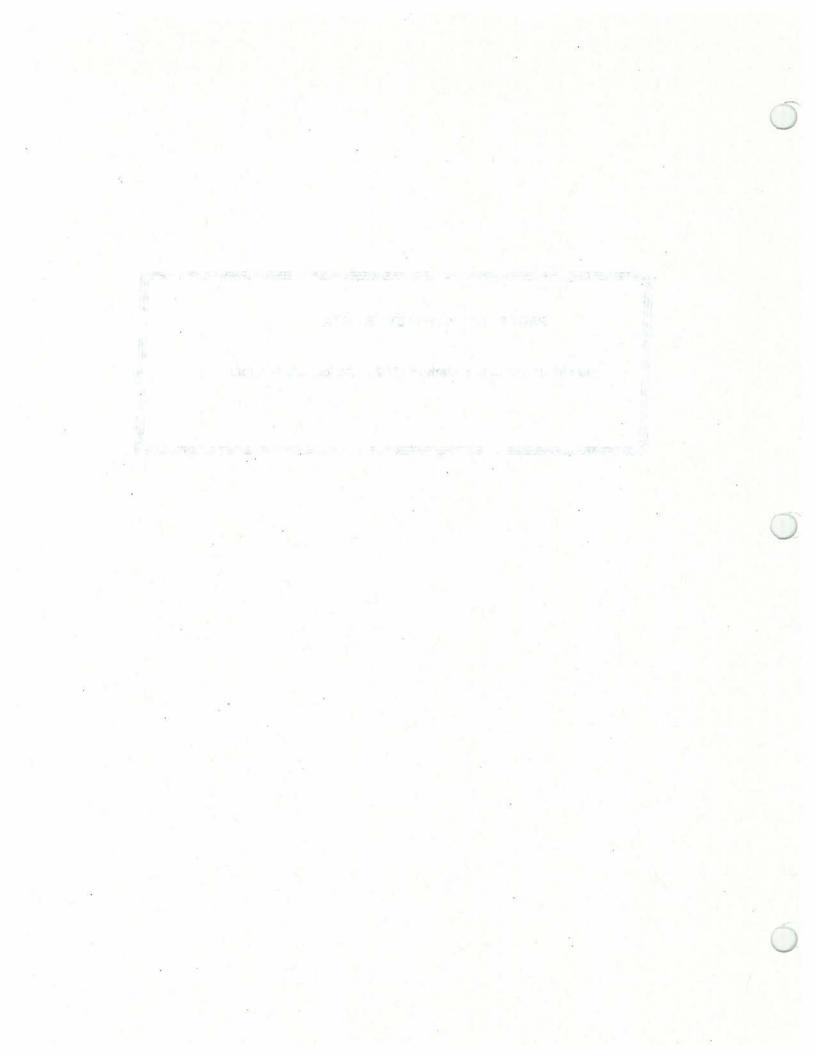
nouliuli Regional Wastewater Treatment Plant - Permit ?	No. HI 00208077	Table 111		OMB Number 20	040-0086	1
k. Parameters measured during the test. (State whether param	Test number: HO060204 eter meets test method specification	Test number	HO061004	Test number:	HO061604	-
н	Yes		Yes		Yes	
Salinity	Yes		Yes		Yes	
Temperature	Yes		Yes		Yes	
Ammonia	Not measured	Not measured Not measure		measured		
Dissolved oxygen	Yes		Yes		Yes	
I. Test Results.					-	K.
Acute:						
Percent survival in 100% effluent		%		%		9
LC50		%		%	4	9/
95% C.I.		%		%		9/
Control percent survival		%		%		9
Other (describe)					*	
hronic:	50 0.00	- hi velati	10 TOOL IN	Mark to the own v		
NOEC REPRODUCTION	2.52	%	2.52	% 1	.26	
IC25		%		%	2004	0
Control percent survival		%		%		
Other (describe) NOEC SURVIVAL		%	ALCA DOUBLE	%		300
m. Quality Control/Quality Assurance.					1000	
Is reference toxicant data available?	Yes	CONTRACTOR OF THE SECOND	Yes		Yes	
Was reference toxicant test within acceptable bounds?	Yes		Yes		Yes	
What date was reference toxicant test run (MM/DD/YYYY)?	06/02/04		06/10/04		06/16/04	
Other (describe)			de.		art of the Land	
Yes No lif yes, describe: Results from WET testing on 05/07/04 A series of accelerated tests showed the a	indicated presence of toxicity	that exceeded !	NPDES permit co	mpliance value	Towards a	
E.4. Summary of Submitted Blomonitoring Test Information of toxicity, within the past four and one-half years, provi	de the dates the information was s	test information, or ubmitted to the perm	information regarding	g the cause a summary of the	results.	
Date submitted: (MM/DD/ Summary of results: (see instructions)	YYYY)		Ten. 1	lien i		
	A Section of the second	Lucia de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición de la composición dela composición de la composición dela				9

PART E. TOXICITY TESTING DATA

Individual test data: Method 1002.0 Ceriodaphnia dubia

PART E. TOXICITY TESTING DATA

Individual test data: Method 1002.0 Ceriodaphnia dubia



Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters.

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate
- QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
 In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

Indicate the number of whole effluen	acute					3
. Individual Test Data. Complete the follow		affluent toxicity test or	anducted in the Is	ast four and one-half v	rears Allow one	
			-		cars. Allow one	
column per test (where each specie	s constitutes a test). Cop	y this page if more tha	n three tests are	being reported.		
	Test number:	HO012000 T	est number:	HO020200	Test number:	HO031500
a. Test information.	The state of the s					
Test species & test method number	C. dub	ia 1002.0	C. dub	ia 1002.0	C. dul	oia 1002.0
Age at initiation of test	< 24	hours	< 24	4 hours	< 2	4 hours
Outfall number	001		001		001	
Dates sample collected	01/19/00 - 01/26/00		02/01/00 - 02/07/00		03/14/00 - 03/20/00	
Date test started	01/	01/20/00		02/02/00		/15/00
Duration	7 days		6 days		6 days	
b. Give toxicity test methods followed.						
Manual title		Estimating The Chronic Tessory of ; Water to Freshwater Organisms		Estimating The Thronia Toxical of g Water to Freshwater Organisms		Estimating The Chronic Toology of Water to Freshwater - Yganisma
Edition number and year of publication	Third Edit	tion, July 1994	Third Edition, July 1994		Third Edition, July 1994	
Page number(s)	14	4 - 189	144 - 189		144 - 189	
c. Give the sample collection method(s	used. For multiple grab	samples, indicate the r	number of grab s	amples used.		
24-Hour composite	Automatic	Flow Composite	Automatic	Flow Composite	Automatic	: Flow Composite
Grab						
d. Indicate where the sample was take	n in relation to disinfection	n. (Check all that apply	for each)	1 721	_	
Before disinfection			1 14111			5
After disinfection						
After dechlorination		7 .0				

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prouliuli Regional Wastewater Treatment Plant - Permit No. HI 0020877

Form Approved 1/14/99 OMB Number 2040-0086

	Test number:	HO012000	Test number:	HO020200	Test number:	HO031500
e. Describe the point in the treatment proce	ess at which the sample	e was collected.			Section 1	
ample was collected:	Downstream from	all plant additions	Downstream fro	m all plant additions	Downstream from	n all plant additions
f. For each test, include whether the test w	as intended to assess	chronic toxicity, acut	e toxicity, or both	1		H 4 I
Chronic toxicity		~		/	- o - o -	-
cute toxicity	•		E			
g. Provide the type of test performed.				19,44		
Static	4.4				1 4 4 40	
Static-renewal		~		~	102-010	/
Flow-through					400	
h. Source of dilution water. If laboratory	vater, specify type; if re	eceiving water, speci	fy source.		-/	No. of the s
Laboratory water	Synthetic M	Ioderate Hard Wa	iter Synthetic	Moderate Hard Wa	ater Synthetic	Moderate Hard Wat
Receiving water		100 Table 1	e and estimate	ann ann eac	all the trade of	- 1,30 A - **
i. Type of dilution water. It salt water, sp	ecify "natural" or type o	f artificial sea salts o	r brine used.			
Fresh water		~		~		
Salt water						
j. Give the percentage effluent used for	all concentrations in th	e test series.				
		0.00		0.00	-	0.00
		0.16		0.16	-	0.10
			1	0.63		0.63
		0.63		1.26		1.26
		2.52		2.52		2.52
k. Parameters measured during the tes	st. (State whether para		hod specification	ıs)		8
рН	11	Yes		Yes		Yes
Salinity		Yes	THE RES	Yes	FORM /	Yes
Temperature		Yes		Yes		Yes
		lot measured		Not measured		Not measured
Ammonia				Yes		Yes
Dissolved oxygen		Yes		103		
I. Test Results.						
Acute:						*
Percent survival in 100% effluent			%	1	%	
LC50		3		•		E
95% C.I.		¥	%		%	
Control percent survival	14		%	i n	%	
Other (describe)						

EPA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22

ACILITY NAME AND PERMIT NUMBER:			Form Approved 1/14/99 OMB Number 2040-0086			
Honouliuli Regional Wastewater Treatment P	lant - Permit No. HI	0020877	1- 200	CIVID	Willinger 2040-0080	lk m
hronic:						
NOEC REPRODUCTION	2.52	%	2.52	%	2.52	%
IC25	0	%	78 POW	%	1 100	%
Control percent survival	- 1	%	B	%		%
Other (describe) NOEC SURVIVAL	2.52	%	2.52	%	2.52	%
m. Quality Control/Quality Assurance.				The second	10 C 17 PS 11 W	-
Is reference toxicant data available?	Yes		Yes		Yes	
Was reference toxicant test within acceptable bounds?	Yes		Yes		Yes	
What date was reference toxicant test run (MM/DD/YYYY)?	01/29/00		02/09/00		03/07/00	72 544
Other (describe)						
E.3. Toxicity Reduction Evaluation. Is the treation. Yes		Toxicity Reduction	n Evaluation?			

EPA Form 3510-2A (Rev. 1-99). Replaces EPA forms 7550-6 & 7550-22.

Honouliuli WWTP

a. Test information.			
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
ge at initiation of test	< 24 hours	< 24 hours	< 24 hours
outfall number	001	001	001
ates sample collected	04/09/00 - 04/15/00	05/14/00 - 05/20/00	06/09/00 - 06/15/00
Date test started	04/10/00	05/15/00	06/10/00
Duration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methods For Estimating The Chrosic Toxicity of Efficients and Receiving Water to Freshwater Organisms	Short-Term Methods For Estuming The Chronic Terocally of Efficients and Keneving Water to Freshwater Organisms	ibert-Term Medicels For Estimating The Chronic Teodolty o Efficients and Kesseving Water Id Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	144 - 189	144 - 189
	or multiple grab samples, indicate the number of	grab samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab			
	tion to disinfection. (Check all that apply for each)		
Before disinfection			
After disinfection			
After dechlorination			
e. Describe the point in the treatment process	at which the sample was collected.	35 4 5 70	particular for the control
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant additi
f. For each test, include whether the test was	intended to assess chronic toxicity, acute toxicity,		helpen I set
Chronic toxicity			· · · · · · · · · · · · · · · · · · ·
Acute toxicity			100
g. Provide the type of test performed.	-		= .
Static		· ·	
Static-renewal		~	. /
	the state of the s		11.000
Flow-through			
W-Source Day W	r, specify type; if receiving water, specify source.		
W-Source Day W		er Synthetic Moderate Hard Water	Synthetic Moderate Hard W
h. Source of dilution water if laboratory water Laboratory water		er Synthetic Moderate Hard Water	Synthetic Moderate Hard W
h. Source of dilution water. If laboratory water Laboratory water Receiving water			Synthetic Moderate Hard W
h. Source of dilution water. If laboratory water Laboratory water Receiving water	Synthetic Moderate Hard Water		Synthetic Moderate Hard W
h. Source of dilution water. If laboratory water Laboratory water Receiving water i. Type of dilution water. It salt water, specify	Synthetic Moderate Hard Water and Wa	ed.	
h. Source of dilution water. If laboratory water Laboratory water Receiving water i. Type of dilution water. It salt water, specify Fresh water Salt water	Synthetic Moderate Hard Water and Wa	ed.	
h. Source of dilution water. If laboratory water Laboratory water Receiving water i. Type of dilution water. It salt water, specify Fresh water	Synthetic Moderate Hard Water "natural" or type of artificial sea saits or brine use concentrations in the test series.	od	0.00
h. Source of dilution water. If laboratory water Laboratory water Receiving water i. Type of dilution water. It salt water, specify Fresh water Salt water	Synthetic Moderate Hard Water and Wa	0.00 0.16	0.00
h. Source of dilution water. If laboratory water Laboratory water Receiving water i. Type of dilution water. It salt water, specify Fresh water Salt water	Synthetic Moderate Hard Water "natural" or type of artificial sea saits or brine use concentrations in the test series.	od	0.00

ACILITY NAME AND PERMIT NUMBER:	Honouliuli WWTP HI 0020877	pinonall sec	Form Approved 1/14/99 OMB Number 2040-0086
	Test number: HO041000	Test number: HO051500	Test number: HO061000
k. Parameters measured during the test. (State whether	parameter meets test method specifica	ations)	
pH	Yes	Yes	Yes
Salinity	Yes	Yes	Yes Yes
Temperature	Yes	Yes	Yes
Ammonia .	Not measured	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.		constitution and the	70.00
Acute:			
Percent survival in 100% effluent	in the action	%	% %
LC ₅₀			
95% C.I.		%	% %
. Control percent survival	A State of March 1 and	%	% %
Other (describe)			
Chronic:			to represent the constraint of
NOEC REPRODUCTION	2.52	% 2.52	% 2.52 %
IC ₂₅		%	%
Control percent survival		%	%
Other (describe) NOEC SURVIVAL	2.52	% 2.52	% 2.52 %
m. Quality Control/Quality Assurance.	T A TIL	ing of Equivalence (School	TO SAME A TO
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes

04/17/00

05/08/00

06/18/00

What date was reference toxicant test run (MM/DD/YYYY)?

____Yes ____ No If yes, describe: _

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Honouliuli WWTP HI 0020877

	est number: HO071900 Tes	t number: HO082200 Tes	HO092200
a. Test information.			
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
ge at initiation of test	< 24 hours	< 24 hours	< 24 hours
Outfall number	001	-001	001
Dates sample collected	07/18/00 - 07/24/00	05/14/00 - 05/20/00	06/09/00 - 06/15/00
eate test started	07/19/00	08/22/00	09/22/00
Ouration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methods For Estimaters The Chronic Tougsty of Efficients and Receiving Water to Freshwater Organisms	hort-Term Methods For Estimating The Chronic Topicity of S Efficients and Kecewing Water to Freshwater Organisms	host-Term Methods For Estimating The Chronic Totacity of Efficients and Kecewing Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	144 - 189	144 - 189
c. Give the sample collection method(s) used. For multiple	grab samples, indicate the number of g	rab samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab			
d. Indicate where the sample was taken in relation to disin	nfection. (Check all that apply for each)		1.58
Before disinfection			
After disinfection			The state of the s
After dechlorination	62 (3.1.1.1)		
e. Describe the point in the treatment process at which the	ne sample was collected.		
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition
f. For each test, include whether the test was intended to			
Chronic toxicity	-	-	/ /
Acute toxicity	107	100 mallweighten	The second second
g. Provide the type of test performed.			Light Heat
Static			
Static-renewal	-	_	_
Flow-through		xt. II	
h. Source of dilution water. If laboratory water, specify t	ype; if receiving water, specify source.		
Laboratory water		Synthetic Moderate Hard Water	Synthetic Moderate Hard W
Receiving water	Dynaicae Massacrate Factor		
i. Type of dilution water. It salt water, specify "natural" of	or type of artificial sea salts or brine used		
Fresh water		_	-
Salt water			*
j. Give the percentage effluent used for all concentration	ons in the test series.		
	0,00	0,00	0,00
	0.16	0.16	0.16
	0.32	0.32	0.63
	1.26	1.26	1.26

Honouliuli WWTP FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 HI 0020877 HO071900 HO082200 HO092200 Test number: Test number: Test number: k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH . Yes Yes Yes Salinity Yes Yes Yes Temperature Not measured Not measured Not measured Ammonia Dissolved oxygen Yes Yes Yes I. Test Results. Acute: Percent survival in 100% effluent % % % LC₅₀ 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION % 2.52 % % 2.52 2.52 IC25 % % % Control percent survival % % % Other (describe) % % 2.52 2.52 % 2.52 NOEC SURVIVAL m. Quality Control/Quality Assurance.

Yes

Yes

07/10/00

Yes

Yes

08/09/00

Yes

Yes

09/15/00 -

Is reference toxicant data available?

Was reference toxicant test within

What date was reference toxicant test run (MM/DD/YYYY)?

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

If yes, describe:

acceptable bounds?

Honouliuli WWTP HI 0020877

and the second of the second			
a. Test information.			
Test species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
Age at initiation of test	< 24 hours	< 24 hours	< 24 hours
Outfall number	001	001	001
Dates sample collected	10/18/00 - 10/23/00	11/08/00 - 11/14/00	12/08/00 - 12/14/00
Date test started	10/18/00	11/09/00	12/08/00
Duration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methoris For Estimating The Chronis Towardy of Efficients and Recovering Water to Freshvater Crypnians	Short-Term Methods For Estimating The Chronic Tousiaby of Efficients and Receiving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Touristy of Killiants and Kecewing Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	144 - 189	144 - 189
c. Give the sample collection method(s) used.	For multiple grab samples, indicate the number of	grab samples used.	E TO MINE
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab'	7/		
d. Indicate where the sample was taken in rela	ation to disinfection. (Check all that apply for each)		
Before disinfection			-1.6
After disinfection			, Philippin
After dechlorination	A LONG LEVE		Property and the
e. Describe the point in the treatment process	s at which the sample was collected.	SE 0	X-1 2
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition
f. For each test, include whether the test was	intended to assess chronic toxicity, acute toxicity.		
Chronic toxicity		-	
Acute toxicity			
g. Provide the type of test performed.			- Usin III
Static			
Static-renewal			-
Flow-through			
h. Source of dilution water. If laboratory water	er, specify type; if receiving water, specify source.		
Laboratory water	Synthetic Moderate Hard Water	er Synthetic Moderate Hard Water	Synthetic Moderate Hard Wa
Receiving water			
i. Type of dilution water. It salt water, specifi	"natural" or type of artificial sea salts or brine use	ed.	
Fresh water			-
Salt water			
j. Give the percentage effluent used for all of	concentrations in the test series.		
	0.00	0.00	0,00
	0.16 0.32	0.16	0.16
	0,63	0.63	0,63
	1.26	1.26	1.26

CILITY NAME AND PERMIT NUMBER:	Honouliuli HI 002087	The State of the S	rie leu	rucki)	at at		rm Approved MB Number 2		
10 C 20 A 10 B	Test number:	HO101800	Те	st number:	HO110900)Te	st number:	HO12080	0
k. Parameters measured during the test. (State whether p	arameter meets	test method spec	ification	s)					
рН		Yes			Yes		II SWI	Yes	
Salinity		Yes			Yes		W. Loc 986	Yes	11
Temperature		Yes	-		Yes		761	Yes	
Ammonia	No	t measured		Not	measured		No	t measured	*
Dissolved oxygen		Yes			Yes			Yes	
I. Test Results.					- 1				
Acute:	77 1						14 100	-	
Percent survival in 100% effluent	Earl F	* U	%			%	-		%
LC ₅₀			1						7.
95% C.I.			%			%	110		9
Control percent survival			%		- Statemen	%			0
Other (describe)					-7-21-21				
Chronic:						-			7.
NOEC REPRODUCTION	Hell	2.52	%	organia i	2.52	%		2.52	(
IC ₂₅	20		%	1	F	%		0.111.00	
Control percent survival			%			%			
Other (describe) NOEC SURVIVAL		2.52	%		2.52	%		2.52	
m. Quality Control/Quality Assurance.			- 607	TAPES	II JI SAY		2		
Is reference toxicant data available?		Yes ·	110	-Fi-	Yes			Yes	
Was reference toxicant test within acceptable bounds?		Yes			Yes		E-27	Yes	
What date was reference toxicant test run (MM/DD/YYYY)?		10/09/00		11/16/00		-		12/07/00	
Other (describe)						deg l	100	. T. E	
E.3. Toxicity Reduction Evaluation. Is the treatment w	vorks involved in	a Toxicity Reduct	ion Eval	uation?					

Honouliuli WWTP HI 0020877

	Test number: HO011701	Test number: HO022101 Tes	t number: <u>HO031601</u>
a. Test information.			147
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
age at initiation of test	< 24 hours	< 24 hours	< 24 hours
Outfall number	001	001	001
Dates sample collected	01/16/01 - 01/22/01	02/20/01 - 02/26/01	03/15/01 - 03/21/01
Date test started	01/17/01	02/21/01	03/16/01
Ouration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Sheet-Term Methods For Estimating The Chronic Toxically of Efficients and Keeseving Water to Freshwater Oryanisms	Short-Term Methods For Estimating The Chronic Tougaty of Efficients and Receiving Water to Freshvatter Organisms	then-Term Methods For Estimating The Chronic Totality of Efficients and Receiving Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
	144 - 189	144 - 189	144 - 189
Page number(s) c. Give the sample collection method(s) used.	For multiple grab samples, indicate the number		Tester T
	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
24-Hour composite	Automatic Flow Composite	Administration Composite	Automatio From Composito
Grab	lation to disinfection. (Check all that apply for each	h)	
220 N N N N N			
Before disinfection			
After disinfection			
After dechlorination			
e. Describe the point in the treatment proces			
Sample was collected:		ns Downstream from all plant additions	Downstream from all plant addition
	s intended to assess chronic toxicity, acute toxicit	y, or both.	
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory wat	ter, specify type; if receiving water, specify source		TV TO THE RESERVE
Laboratory water	Synthetic Moderate Hard Wa	ater Synthetic Moderate Hard Water	Synthetic Moderate Hard Wa
Receiving water			-
 Type of dilution water. It salt water; specified 	fy "natural" or type of artificial sea salts or brine u		
		_	_
Fresh water	_		
Salt water			
The second secon	concentrations in the test series.		
Salt water	concentrations in the test series.	0.00	0.00
Salt water	concentrations in the test series.	0.00 0.16 0.32	0.16 0.32
Salt water	concentrations in the test series. 0,00 0.16	0.16	0.16

ACILITY NAME AND PERMIT NUMBER:	Honouliuli WWTP HI 0020877	(dpocuE)	11/00	Form Approved OMB Number 2		Lley."
	Test number: HO011701	Test number	HO022101	Test number:	HO031601	
k. Parameters measured during the test. (State whether	parameter meets test method specific	ations)				
рН	Yes		Yes		Yes	
Salinity	Yes		Yes		Yes	
Temperature	Yes		Yes		Yes	
Ammonia	Not measured	N	lot measured	Not	measured	
Dissolved oxygen	Yes	Yes		Yes		
I. Test Results.					F0.14	
Acute:		ATTENDED				
Percent survival in 100% effluent	Little Till Till Till Till Till Till Till Ti	%		%	ER TRAFO.	%
LC ₅₀				-	1000	
95% C.I.		%		%		%
Control percent survival		%		%		%
Other (describe)						
Chronic:-		7			343/-34	
NOEC REPRODUCTION	2.52	%	2.52	% 2	52	%
IC ₂₅		%		%		%
Control percent survival	The second second	%		%	23901 100 32	%
Other (describe) NOEC SURVIVAL	2.52	%	2.52	%	2.52	%
m. Quality Control/Quality Assurance.	and the state of	1111 44 111	Section of the se	11 11 11 11 11	S.L.IL	
Is reference toxicant data available?	Yes		Yes	133	Yes	T

Yes

01/10/01

Yes

02/02/01

Yes

03/09/01

.3. Toxi	icity Reduction Evaluation. Is the treatment works inventor	olved in a Toxicity Reduction Evaluation?	
	Yes NoIf yes, describe:	*	

Was reference toxicant test within

What date was reference toxicant test run (MM/DD/YYYY)?

acceptable bounds?

Honouliuli WWTP

	Test number: HO042301 Te	est number: HO051801 Tes	st number: HO062201
a. Test information.			
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
age at initiation of test	< 24 hours	< 24 hours	< 24 hours
Outfall number	524 001	001	001
Dates sample collected	04/22/01 - 04/28/01	05/17/01 - 05/22/01	06/21/01 - 06/27/01
Date test started	04/23/01	05/18/01	06/22/01
Duration	6 days	5 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methods For Estimating The Chronic Torquity of Rifflients and Receiving Water to Freshwater Organisms	Short-Turn Methods For Estimating The Chronic Toxicity of Efficients and Keneving Water to Freshwater Organizate	Short-Term Methods For Estimating The Chronic Toxically of Efficients and Keceiving Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	144 - 189	144 - 189
	For multiple grab samples, indicate the number of	grab samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab .			
	ation to disinfection. (Check all that apply for each)	47	
Before disinfection			1 -1 -1 -
After disinfection			
After dechlorination	C Transfer		
e. Describe the point in the treatment process	s at which the sample was collected.	18.00	CULTURE IN INCIDENT
Sample was collected:		Downstream from all plant additions	Downstream from all plant addition
	intended to assess chronic toxicity, acute toxicity,		
Chronic toxicity	-		-
Acute toxicity		100000000000000000000000000000000000000	
g. Provide the type of test performed.	1.5		74 (19)
Static		165	120
Static-renewal	_	-	-
Flow-through		I 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
A Committee of the Comm	er, specify type; if receiving water, specify source.		
Laboratory water	Synthetic Moderate Hard Water	er Synthetic Moderate Hard Water	Synthetic Moderate Hard Wa
Receiving water	Symmono Moderate Flare Water	Symmone Wilder and Thank William	· ·
	y "natural" or type of artificial sea salts or brine use	rd.	
Fresh water			_
Salt water			
j. Give the percentage effluent used for all of	concentrations in the test series		
j. Give the percentage emberit used for all t	0,00	0.00	0.00
	0.16	0.16	0.16
	0,32	0.32	0.32
	0.63 1.26	0.63	0.63
	2.52	2.52	2.52

FACILITY NAME AND PERMIT NUMBER:	Honouliuli HI 0020877		phicosoft in deal	-10-	Form Approved OMB Number 2	
Charles 20 Company	Test number:	HO042301	Test number:	HO051801	Test number:	HO062201
k. Parameters measured during the test. (State whether	parameter meets	est method specificat	ions)	and the late		
рН		Yes		Yes		Yes
Salinity		Yes	LLL	Yes	Morr Table	Yes
Temperature		Yes		Yes		Yes
Ammonia -	Not	measured	No	measured	Not	measured
Dissolved oxygen		Yes		Yes	1 1 1	Yes
I. Test Results.						
Acute:	4					
Percent survival in 100% effluent		9/	6	0	6	
LC ₅₀		D TO SERVICE				
95% C.I.	•	9	6	T.	%	
Control percent survival		9	6		%	
Other (describe)						
Chronic:						
NOEC REPRODUCTION	2	.52	6 2	2.52	% 2	.52
IC ₂₆		c	%		%	
Control percent survival			%		%	p. metables 7 of 2
Other (describe) NOEC SURVIVAL	2	.52	%	2.52	%	2.52
m. Quality Control/Quality Assurance.		440	1 -	1,000,000 (0.00)	agent green	Ang
Is reference toxicant data available?	- Series	Yes		Yes		Yes
Was reference toxicant test within acceptable bounds?		Yes		Yes		Yes
What date was reference toxicant test run (MM/DD/YYYY)?	,	04/17/01	7-1-	05/10/01	-	06/03/01
Other (describe)				1000	e del la pr	

Yes ____ No If yes, describe:

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Honouliuli WWTP HI 0020877

	Test number: HO072301	_Test number: HO082101 Te	st number: HO092301	
a. Test information.				
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0	
Age at initiation of test	< 24 hours	< 24 hours	< 24 hours	
Outfall number	001	. 001	001	
Dates sample collected	07/22/01 - 07/27/01	08/20/01 - 08/26/01	09/22/01 - 09/27/01	
Date test started	07/23/01	08/21/01	09/23/01	
Duration	5 days	6 days	5 days	
b. Give toxicity test methods followed.				
Manual title	Short-Term Methods For Estimating The Chronic Totacity Efficients and Receiving Water to Freshwater Organisms	of Sheet-Term Methods For Retired ing The Chronic Toxically of Efficients and Keceving, Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Tossisty of Efficients and Keserving Water to Freshwater Organisms	
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994	
Page number(s)	144 - 189	144 - 189	144 - 189	
c. Give the sample collection method(s) used	. For multiple grab samples, indicate the number	r of grab samples used.	1	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite	
Grab				
d. Indicate where the sample was taken in re	lation to disinfection. (Check all that apply for ea	ch)		
Before disinfection			#	
After disinfection				
After dechlorination			A STATE OF	
e. Describe the point in the treatment proces	ss at which the sample was collected.		and the first of the	
Sample was collected:	Downstream from all plant addit	ons Downstream from all plant additions	Downstream from all plant additi	
f. For each test, include whether the test wa	s intended to assess chronic toxicity, acute toxic			
Chronic toxicity			-	
Acute toxicity	187.		Cienalization and Internal	
g. Provide the type of test performed.				
Static				
Static-renewal	_	_	-	
Flow-through		·		
h. Source of dilution water. If laboratory wa	ter, specify type; if receiving water, specify sour	ce.		
Laboratory water	Synthetic Moderate Hard W	ater Synthetic Moderate Hard Water	Synthetic Moderate Hard W	
Receiving water				
i. Type of dilution water. It salt water, speci	fy "natural" or type of artificial sea salts or brine	used.	VI	
Fresh water	-	_	-	
Salt water				
j. Give the percentage effluent used for all	concentrations in the test series.			
	0.00	0,00	0.00	
	0.16	0.16	0.16	
		0,63	0.63	
	0.63	0.03	1,03	

Honouliuli WWTP HI 0020877

k. Parameters measured during the test. (State whether pa	rameter meets	test method specific	ations)				
	Yes			Yes		Yes	
alinity		Yes		Yes		Yes	36
emperature		Yes		Yes		Yes	
mmonia	Not	measured		Not measure	d	Not measured	
issolved oxygen		Yes	4	Yes		Yes	
I. Test Results.							T.
cute:							
Percent survival in 100% effluent	- ·	20 Table	%		%		
LC ₅₀							
95% C.I.			%		. %		
Control percent survival	1695		%	N ASSESSMENT	%		14
Other (describe)							
Chronic:							
NOEC REPRODUCTION	2	2.52	%	2.52	%	2.52	
IC ₂₅			%		%		
Control percent survival			%		%		
Other (describe) NOEC SURVIVAL	2	2.52	%	2.52	%	2.52	
m. Quality Control/Quality Assurance.				- F. P. (1989)		A THE REST OF THE REST OF	
Is reference toxicant data available?		Yes	er l	Yes		Yes	
Was reference toxicant test within acceptable bounds?		Yes	- 1	Yes		Yes	
What date was reference toxicant test run (MM/DD/YYYY)?	07/15/01			08/09/01		09/09/01	
Other (describe)				,	200	1000	
E.3. Toxicity Reduction Evaluation. Is the treatment wo	rks involved in a	a Toxicity Reduction	Evaluatio	n?			

Honouliuli WWTP HI 0020877

		A CONTRACTOR OF THE CONTRACTOR	1.00
a. Test information.			*
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
ge at initiation of test	< 24 hours	< 24 hours	< 24 hours
utfall number	001	. 001	001
ates sample collected	10/12/01 - 10/18/01	11/23/01 - 11/29/01	12/14/01 - 12/20/01
ate test started	10/13/01	11/24/01	12/15/01
Duration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methods For Estimating The Chronic Toucisty of Efficients and Receiving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Toxicity of Efficients and Kecewing Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Totalogy of Efficients and Receiving Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	. 144 - 189	144 - 189
	For multiple grab samples, indicate the number of	grab samples used.	100
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab			
	ation to disinfection. (Check all that apply for each)		119 - 1969.
Before disinfection			
After disinfection	* ,		
After dechlorination	30.0		
e. Describe the point in the treatment process	s at which the sample was collected.		
Sample was collected:		Downstream from all plant additions	Downstream from all plant additi
	intended to assess chronic toxicity, acute toxicity,		
Chronic toxicity		_	
Acute toxicity	W I TO		Programmer .
g. Provide the type of test performed.	, , , , , , , , , , , , , , , , , , , ,	<u> </u>	
Static	+		
Static-renewal		-	-
Flow-through		The second second	
	er, specify type; if receiving water, specify source.		
Laboratory water		er Synthetic Moderate Hard Water	Synthetic Moderate Hard W
Receiving water	Synthetic Production 122 William	James Medical Care Walls	
A part of the part	y "natural" or type of artificial sea salts or brine use	d.	
Fresh water			_
Salt water			
j. Give the percentage effluent used for all of	concentrations in the test series.		
j. Give the personnage emach asset for all c	0.00	0,00	0,00
	0.16	0.16	0.16
	0.32	0.32	0.32
properties and the second seco	0.63	0.03	1.26

FACILITY NAME AND PERMIT NUMBER:	Honouliuli WWTP HI 0020877	Lance Pi Historia	Form Approved 1/14/99 OMB Number 2040-0086
	Test number: HO101301	Test number: HO112401	Test number: HO121501
k. Parameters measured during the test. (State whether	parameter meets test method specification	ons)	
pH	Yes	Yes	Yes
Salinity	Yes	Yes	Yes
Temperature	Yes	Yes	Yes
Ammonia	Not measured .	Not measured	Not measured
Dissolved oxygen	Yes	Yes	Yes
I. Test Results.			
Acute:			
Percent survival in 100% effluent	%	- II	%
LC ₅₀	and the second s		AND
95% C.I.	%		%
Control percent survival	%	te i bassing las dans	%
Other (describe)			
Chronic:			
NOEC REPRODUCTION	2.52 %	2.52	% 2.52 %
IC ₂₆	9/		% . %
Control percent survival	. 9/	6	% 9
Other (describe) NOEC SURVIVAL	2.52 %	6 2.52	% 2.52 %
m. Quality Control/Quality Assurance.		ere et esterni un de de	LANGE THE
Is reference toxicant data available?	Yes	Yes	Yes
Was reference toxicant test within acceptable bounds?	Yes	Yes	Yes

10/06/01

11/14/01

12/01/01

What date was reference toxicant test run (MM/DD/YYYY)?

____Yes __ No If yes, describe: _

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Honouliuli WWTP HI 0020877

	Test number: HO012302 Te	est number: HO022102 Tes	HO030402
a. Test information.			
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
age at initiation of test	< 24 hours	< 24 hours	< 24 hours
Outfall number	001	001	001
Dates sample collected	01/22/02 -01/28/02	02/20/02 -02/26/02	03/03/02 - 03/09/02
Date test started	01/23/02	02/21/02	03/04/02
Duration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methods For Estimating The Chronic Totority of Efficients and Receiving Water to Freshwater Organisms	Short-Term Methods For Estumsing The Chronic Toracity of Efficients and Kecesving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Tonguity of Efficients and Receiving Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	144 - 189	144 - 189
c. Give the sample collection method(s) used. For	multiple grab samples, indicate the number of	grab samples used.	appears and a
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab		Car Hall Services	
d. Indicate where the sample was taken in relation	n to disinfection. (Check all that apply for each)		Parameter and the second
Before disinfection			
After disinfection			The state of the state of
After dechlorination	a mine	* 1 * * *	49. A. 18
e. Describe the point in the treatment process at	which the sample was collected.		
Sample was collected:		Downstream from all plant additions	Downstream from all plant additi
f. For each test, include whether the test was int			1 ST 1
Chronic toxicity		-	
Acute toxicity	256-17		AN A
g. Provide the type of test performed.			
Static			
Static-renewal		-	~
Flow-through			*
h. Source of dilution water. If laboratory water,	specify type; if receiving water, specify source.		
Laboratory water	Synthetic Moderate Hard Wat	er Synthetic Moderate Hard Water	Synthetic Moderate Hard W
Receiving water			
i. Type of dilution water. It salt water, specify "r	natural" or type of artificial sea salts or brine use	ed.	
Fresh water		~	_
Salt water			•
Salt water i. Give the percentage effluent used for all con-	centrations in the test series.		
Salt water j. Give the percentage effluent used for all con	0,00	0,00	0.00
Salayan Principal A	0,00	0.16	0.16
Service Control of the Control of th	0,00		

mber: HO012302 1					
TIONIESOE I	est number:	HO022102	Test number:	HO03040	2
r meets test method specification	ons)				
Yes		Yes		Yes	
Yes		Yes	September 1	Yes	
Yes		Yes	No	Yes	7
Not measured	Not	measured	Not	measured	
Yes		Yes		Yes	
5300	102			100 mail	-
					+ .
06	191	0/			- 0
	7-7	70			9
%		94		-	9
					9
				The second	
	-		V 10- 100		-
2.52 %	2	.52 %	2	52	c
				.52	
%					-
2.52 %	2			.52	
a: Erdor, in it	and more than	keeped been	The p	ratio at	5
Ves		Vau	1900	Van	7
Yes		Yes			-
01/10/02	(02/10/02			
		Santa-		03/11/02	
	Yes Yes Yes Not measured Yes % % % 2.52 % Yes Yes Yes Yes Yes O1/10/02	Yes Yes Not measured Not Yes % % % 2.52 % 2.52 % 2.52 % 2.52 % 2.52 Yes Yes	Yes Yes Yes Yes Yes Yes Not measured Not measured Yes Yes % %	Yes Yes Yes Yes Yes Yes Not measured Not Yes Yes % % % % % % % % % % % % % % % % % % % % 2.52 % 2 Yes Yes Yes Yes Yes Yes 01/10/02 02/10/02	Yes Yes Yes Yes Yes Yes Yes Yes Yes Not measured Not measured Not measured Yes Yes Yes % % % % % % % % % 2.52 % 2.52 % % % 2.52 % 2.52 Yes Yes Yes Yes Yes Yes Yes Yes Yes 01/10/02 02/10/02 03/11/02

Honouliuli WWTP HI 0020877

	Library Table 1967	CONTRACTOR OF STREET	Comment of the second
a. Test information.		The second second second	
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
ge at initiation of test	< 24 hours	< 24 hours	< 24 hours
utfall number	001	001	001
ates sample collected	04/08/02 - 04/14/02	05/09/02 - 05/15/02	06/02/02 - 0608/02
ate test started	04/09/02	05/10/02	06/03/02
Ouration	6 days	6 days	6 days
b. Give toxicity test methods followed.			A CONTRACTOR OF THE PARTY OF TH
Manual title	Short-Term Methods For Estimating The Chronic Toleraty of Effluents and Receiving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Toxically of Efficients and Keceving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Torquity of Efficients and Receiving Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	144 - 189	144 - 189
	For multiple grab samples, indicate the number of	grab samples used.	THE STATE OF THE STATE OF
24-Hour composite	. Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab			
	ation to disinfection. (Check all that apply for each)		
Before disinfection			
After disinfection			
After dechlorination	te te		WIGH Call
e. Describe the point in the treatment process	s at which the sample was collected.	M 4-19	the base of the
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant additi
f. For each test, include whether the test was	intended to assess chronic toxicity, acute toxicity,		DV To the option
Chronic toxicity			
Acute toxicity		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	THE CONTRACTOR OF THE PARTY OF
g. Provide the type of test performed.	• 7		11/4/14 -
Static			and the same
Static-renewal	~	-	-
Flow-through			
h. Source of dilution water. If laboratory wat	er, specify type; if receiving water, specify source.		
Laboratory water	Synthetic Moderate Hard Water	Synthetic Moderate Hard Water	Synthetic Moderate Hard W
Receiving water			
i. Type of dilution water. It salt water, specif	y "natural" or type of artificial sea salts or brine use	d.	
Fresh water		-	/
Salt water			
j. Give the percentage effluent used for all of	concentrations in the test series.		
	0,00	0.00	0.00
	200 S 200 S 200 S 200 S 200 S	0.0000	
	0,16	0.16	0.16
	200 S 200 S 200 S 200 S 200 S	0.16 0.32 0.63	0.16 0.32 0.63

FACILITY NAME AND PERMIT NUMBER: Honouliuli WWTP Form Approved 1/14/99 OMB Number 2040-0086 HI 0020877 HO040902 Test number: Test number: HO051002 HO060302 Test number: k. Parameters measured during the test. (State whether parameter meets test method specifications) pH Yes Yes Yes Salinity Yes Yes Yes Yes · Temperature Yes Yes Ammonia Not measured Not measured Not measured Dissolved oxygen Yes Yes Yes I. Test Results. Acute: Percent survival in 100% effluent % % % LC50 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION % 2.52 2.52 % 2.52 % IC25 % % % Control percent survival % % % Other (describe) NOEC SURVIVAL 2.52 % 2.52 % % 2.52 m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within

Yes

04/07/02

Yes

05/10/02

Yes

06/14/02

What date was reference toxicant test run (MM/DD/YYYY)?

acceptable bounds?

Honouliuli WWTP HI 0020877

	Test number: <u>HO07/01/02</u>	Test number: HO08/01/02 Te	t number: HO09/02/02	
a. Test information.	1			
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0	
ge at initiation of test	< 24 hours	< 24 hours	< 24 hours	
outfall number	001	001	. 001	
oates sample collected	06/30/02 - 07/06/02	07/31/02 - 08/06/02	09/01/02 - 09/07/02	
Date test started	07/01/02	08/01/02	09/02/02	
Duration	6 days	6 days	6 days	
b. Give toxicity test methods followed.				
Manual title	Short-Term Methods For Estimating The Chronic Tota-sky of Efficients and Kecewing Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Topicity of Effluents and Receiving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Tomosty Effluents and Receiving Water to Freshwater Organisms	
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994	
Page number(s)	144 - 189	144 - 189	144 - 189	
	For multiple grab samples, indicate the number of	of grab samples used.		
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite	
Grab				
	ation to disinfection. (Check all that apply for each	1)		
Before disinfection				
After disinfection				
After dechlorination				
e. Describe the point in the treatment process	s at which the sample was collected.	70,57407	W 9 _5 *	
Sample was collected:		ns Downstream from all plant additions	Downstream from all plant addit	
f. For each test, include whether the test was	intended to assess chronic toxicity, acute toxicity		in Company in the Company	
Chronic toxicity	· ·			
Acute toxicity	2, 79,		7.1	
g. Provide the type of test performed.		300		
Static				
Static-renewal .	-	~	-	
Flow-through			W	
h. Source of dilution water. If laboratory water	er, specify type; if receiving water, specify source			
Laboratory water	Synthetic Moderate Hard Wa	ter Synthetic Moderate Hard Water	Synthetic Moderate Hard W	
Receiving water				
	y "natural" or type of artificial sea salts or brine us	sed.		
Fresh water			_	
Salt water				
j. Give the percentage effluent used for all of	concentrations in the test series.			
	0,00	0,00	0,00	
	0.16	0.16	0.16	
		0.63	0.63	
	0,63	17,03	(7,03	

ACILITY NAME AND PERMIT NUMBER:	HI 0020877		4500	Form Approved 1/14/99 OMB Number 2040-0086			
	Test number: HO07/01/0	2_Te	st number:	HO08/01/02	Test number:	HO09/02/	02
k. Parameters measured during the test. (State whether p	parameter meets test method spec	fications	5)				
р́Н	Yes		et a sensor es	Yes		Yes	
Salinity.	Yes			Yes		Yes	
Temperature	Yes		. 4	Yes		Yes	
Ammonia	Not measured		Not	measured	No	t measured	10
Dissolved oxygen	Yes	100		Yes		Yes	41
I. Test Results.	L. Hatte	-		-		31 46	
Acute:						104	
Percent survival in 100% effluent		%		0	6		9
LC ₅₀							
95% C.I.		%			%		0
Control percent survival		%			%		
Other (describe)			+ 4				
Chronic:							
NOEC REPRODUCTION	2.52	%	2	52	%	2.52	
IC ₂₅		%			%		.16
Control percent survival		%			%		
Other (describe) NOEC SURVIVAL	2.52	%	2	2.52	%	2.52	
m. Quality Control/Quality Assurance.	1 1-7 50		W	a lapana jan 1844	1 to		
Is reference toxicant data available?	Yes	8		Yes		Yes	
Was reference toxicant test within acceptable bounds?	Yes			Yes		Yes	- 1
What date was reference toxicant test run (MM/DD/YYYY)?	07/15/02			08/17/02		09/16/02	
Other (describe)				Late Mari	11-0		
E.3. Toxicity Reduction Evaluation. Is the treatment w	vorks involved in a Toxicity Reducti	on Evalu	uation?	Landing		=10-5	

Honouliuli WWTP HI 0020877

ere en la companya e en l	est number: HO101302 Te	st number: HO112402 Tes	st number: HO121902
a. Test information.	T T T T		
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
ge at initiation of test	< 24 hours	< 24 hours	< 24 hours
outfall number	001	001	001
pates sample collected	10/12/02 - 10/18/02	11/23/02 - 11/29/02	12/18/02 - 12/24/02
Date test started	10/13/02	11/24/02	12/19/02
Duration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methods For Estimates; The Chronic Teopolty of Efficients and Recovering Water to Freshwater Organization	Short-Term Methods For Estimating The Chronic Torquity of Effluents and Receiving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Touchty of Efficients and Receiving Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	144 - 189	144 - 189
c. Give the sample collection method(s) used. For multiple	grab samples, indicate the number of	grab samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab			
d. Indicate where the sample was taken in relation to disin	nfection. (Check all that apply for each)	A LA COLLEGE STREET	
Before disinfection	- 12°		
After disinfection			
After dechlorination			*: 1
e. Describe the point in the treatment process at which the	ne sample was collected.	7616	
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant additi
f. For each test, include whether the test was intended to		New York Control of the Control of t	
Chronic toxicity			-
Acute toxicity	The Share	3 1 1 W W 1 25	E. Marrier III
g. Provide the type of test performed.			
Static			
Static-renewal	~	-	-
Flow-through		The state of the s	•
h. Source of dilution water. If laboratory water, specify to	ype; if receiving water, specify source.		- The second sec
Laboratory water	Synthetic Moderate Hard Water	Synthetic Moderate Hard Water	Synthetic Moderate Hard W
Receiving water			
i. Type of dilution water. It salt water, specify "natural" o	r type of artificial sea salts or brine used		
Fresh water	-	~	_
Salt water			14
j. Give the percentage effluent used for all concentration	ns in the test series.		T D
	0.00	0.00	0.00
	0.16	0.16	0.16
	0.63	0,63	0.63
	1.26	1.26	1.26

FACILITY	NAME	AND	PERMIT	NUMBER

Honouliuli WWTP

k. Parameters measured during the test. (State whether pa	amater mosts test method specif	inational					
H	Yes	ications)	Yes			Yes	_
Salinity	Yes		Yes		Yes		_
	Yes	-	Yes				
Femperature	Not measured	+				Yes	
Ammonia			Not measured		Not measured		
Dissolved oxygen	Yes		Yes			Yes	
I. Test Results.						May 1 . Part	
Acute:			.,				
Percent survival in 100% effluent		%		%		40	9
LC ₅₀		but.			A second		
95% C.I.	3 D. J. J.	%		%		7-90 - 190	(
Control percent survival	South on Authorities	%	ar of ball to	%	Response	-Au J	
Other (describe)					100		
Chronic:							
NOEC REPRODUCTION	2.52	%	2.52	%	2	.52	7
IC ₂₅		%		%			3
Control percent survival		%		%			W
Other (describe) NOEC SURVIVAL	2.52	%	2.52	%	. 2	52	
m. Quality Control/Quality Assurance.		1775	The decided the		7-27	25 m	
Is reference toxicant data available?	Yes		Yes			Yes	٦
Was reference toxicant test within acceptable bounds?	Yes		Yes			Yes	_
What date was reference toxicant test run (MM/DD/YYYY)?	10/30/02		11/16/02			12/09/02	
Other (describe)			in the	= =::		- 17 3	
E.3. Toxicity Reduction Evaluation. Is the treatment working	ks involved in a Toxicity Reduction		ion?	÷			

Honouliuli WWTP HI 0020877

			and the second second	
a. Test information.				
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0	
Age at initiation of test	< 24 hours	< 24 hours	< 24 hours	
Outfall number	001	001	001	
Dates sample collected	01/02/03 -01/08/03	02/06/03 - 02/12/03	03/23/03 - 03/29/03	
Date test started	01/03/03	02/07/03	03/24/03	
Duration	6 days	6 days	6 days	
b. Give toxicity test methods followed.			7/V	
Manual title	Short-Term Methods For Estimating The Chronic Totality of Efficients and Receiving Whiter to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Toxicity of Efficients and Kosaving Water to Freshwater Organisms	Short-Form Methods For Estimating The Chronic Testinity of Efficients and Receiving Water to Freshwater Organisms	
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994	
Page number(s)	144 - 189	144 - 189	144 - 189	
c. Give the sample collection method(s) used. For multiple	e grab samples, indicate the number of g	rab samples used.		
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite	
Grab	الاحتج إبالمصي			
d. Indicate where the sample was taken in relation to dis	infection. (Check all that apply for each)			
Before disinfection				
After disinfection				
After dechlorination				
e. Describe the point in the treatment process at which t	he sample was collected.		ter 2 to the first	
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addition	
f. For each test, include whether the test was intended t				
Chronic toxicity	-	-	-	
Acute toxicity				
g. Provide the type of test performed.				
Static				
		_	-	
Static-renewal	-	Y		
Static-renewal Flow-through				
Stranger at				
Flow-through	type; if receiving water, specify source.			
Flow-through h. Source of dilution water. If laboratory water, specify the specific	type; if receiving water, specify source.	Synthetic Moderate Hard Water		
Flow-through h. Source of dilution water. If laboratory water, specify to Laboratory water	type; if receiving water, specify source. Synthetic Moderate Hard Water	Synthetic Moderate Hard Water		
Flow-through h. Source of dilution water. If laboratory water, specify to Laboratory water Receiving water	type; if receiving water, specify source. Synthetic Moderate Hard Water	Synthetic Moderate Hard Water		
h. Source of dilution water. If laboratory water, specify to Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" of the salt water, specify "natural" of the salt water.	Synthetic Moderate Hard Water or type of artificial sea salts or brine used.	Synthetic Moderate Hard Water	Synthetic Moderate Hard Wa	
h. Source of dilution water. If laboratory water, specify to Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" of Fresh water	Synthetic Moderate Hard Water or type of artificial sea salts or brine used.	Synthetic Moderate Hard Water	Synthetic Moderate Hard W	
h. Source of dilution water. If laboratory water, specify to Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" of Fresh water Salt water	Synthetic Moderate Hard Water or type of artificial sea salts or brine used.	Synthetic Moderate Hard Water	Synthetic Moderate Hard Wa	
h. Source of dilution water. If laboratory water, specify to Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" of Fresh water Salt water	Synthetic Moderate Hard Water or type of artificial sea salts or brine used	Synthetic Moderate Hard Water	Synthetic Moderate Hard Wa	
h. Source of dilution water. If laboratory water, specify to Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" of Fresh water Salt water	Synthetic Moderate Hard Water or type of artificial sea salts or brine used. ons in the test series.	Synthetic Moderate Hard Water 0.00 0.16	Synthetic Moderate Hard W	

FACILITY NAME AND PERMIT NUMBER: Honouliuli WWTP Form Approved 1/14/99 OMB Number 2040-0086 HI 0020877 HO010303 HO020703 Test number: Test number: Test number: HO032403 k. Parameters measured during the test. (State whether parameter meets test method specifications) pH Yes Yes Yes Yes Yes Salinity Temperature Yes Yes Yes Ammonia Not measured Not measured Not measured Yes Yes Yes Dissolved oxygen I. Test Results. Acute: Percent survival in 100% effluent % % % LC50 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION % 2.52 2.52 % 2.52 % % % % Control percent survival % % % Other (describe) 2.52 % % NOEC SURVIVAL 2.52 % 2.52 m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes Yes

Alony Moa		luation. Is the treatm	icit works involved ii	a roxidity reductio	II Evaluation?		
Yes	_ ✓ No	If yes, describe:					
_				Annual Control	and the same	and the state of t	

02/01/03

01/24/03

Yes

03/04/03

What date was reference toxicant test run (MM/DD/YYYY)?

acceptable bounds?

Honouliuli WWTP HI 0020877

	Test number: HO042303 Te	est number: HO052503 Te	st number: HO062303
a. Test information.			11 - 11 - 11
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
ge at initiation of test	< 24 hours	< 24 hours	< 24 hours
utfall number	001	001	001
ates sample collected	04/22/03 - 04/28/03	05/24/03 - 05/30/03	06/22/03 - 06/28/03
ate test started	04/23/03	05/25/03	06/23/03
uration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methods For Estimating The Chronic Totachy of Efficients and Kecewing Water to Freshwater Organisms	Short-Term Methods For Estimating The Chicago Topicity of Efficients and Keening Water to Freshwater Organisms	Short-Term Methor is For Estanding The Chronic Toxicity of Efficients and Kessiving Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
170	144 - 189	144'- 189	144 - 189
Page number(s)	For multiple grab samples, indicate the number of		
- Committee of the Comm	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
24-Hour composite	Automatic Flow Composite	Automate Flow Composite	rudomano rion composito
Grab	tion to disinfection. (Check all that apply for each)		
	mon to diameterion. (Oneon an diat apply to search		
Before disinfection			
After disinfection			
After dechlorination	A Mark the control of the control of		
e. Describe the point in the treatment process			
Sample was collected:		Downstream from all plant additions	Downstream from all plant addition
f. For each test, include whether the test was	intended to assess chronic toxicity, acute toxicity,	The state of the s	A Maria Cara Cara Cara Cara Cara Cara Cara
Chronic toxicity	-	-	- Section of the sect
Acute toxicity	A Capito		
g. Provide the type of test performed.	2		
Static			
Static-renewal	_	~	<u> </u>
Flow-through		1 10000 AC	4 === =
h. Source of dilution water. If laboratory water	er, specify type; if receiving water, specify source.		
Laboratory water	Synthetic Moderate Hard Wat	er Synthetic Moderate Hard Water	r Synthetic Moderate Hard W
Receiving water			
i. Type of dilution water. It salt water, specify	y "natural" or type of artificial sea salts or brine use	ed.	
Fresh water	_	~	_
Salt water	•		
j. Give the percentage effluent used for all of	concentrations in the test series.		
	0,00	0,00	0.00
	0.16	0.16	0.16
	0.52	0.63	0,63
		17,100	
	1.26	1.26	1.26

ACILITY NAME AND PERMIT NUMBER:	Honouliuli HI 0020877		14/81	amili-			rm Approved MB Number 2		
	Test number:	HO04230	3 Tes	t number:	HO0525	03 Te	est number:	HO06230	3
k, Parameters measured during the test. (State whether	parameter meets	test method spe	cifications)					
pH .		Yes		,	/es			Yes	
Salinity		Yes	4-11	Yes			Yes		
Temperature		Yes			/es			Yes	
Ammonia	Not	measured		Not n	neasured		Not	measured	
Dissolved oxygen		Yes			Yes		- 12	Yes	
I. Test Results.	-							1930%	
Acute:						- 21			
Percent survival in 100% effluent	100	117	%			%			%
LC ₅₀						-			70
95% C.I.			%			%			%
Control percent survival			%	• 15	-North	%	100		%
Other (describe)									
Chronic:									
NOEC REPRODUCTION	2	.52	%	2.5	2	%	2	.52	%
IC ₂₅			%	7		%			%
Control percent survival			%			%	8 7 7 7		9/
Other (describe) NOEC SURVIVAL	2	.52	%	2.5	52	%	2	52	9/
m. Quality Control/Quality Assurance.		- 11-		1.454	-58 A h	****	111 = 11		
Is reference toxicant data available?	-	Yes	300	1	Yes			Yes	П,
Was reference toxicant test within acceptable bounds?		Yes			Yes		W- 12	Yes	(
What date was reference toxicant test run (MM/DD/YYYY)	?	04/02/03	-	0.5	5/05/03			06/02/03	
Other (describe)						1111	den s	niedė s	
E.3. Toxicity Reduction Evaluation. Is the treatment	works involved in a	Toxicity Reduc	tion Evalua	ation?		oug T-u	and the first	of and	9.

Honouliuli WWTP HI 0020877

		A STATE OF THE STA		
a. Test information.				
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0	
Age at initiation of test	< 24 hours	< 24 hours	< 24 hours	
Outfall number	001	001	001	
Dates sample collected	07/25/03 - 07/31/03	08/22/03 - 08/27/03	09/07/03 - 09/13/03	
Date test started	07/26/03	08/23/03	09/08/03	
Duration	6 days	5 days	6 days	
b. Give toxicity test methods followed.				
Manual title	Short-Term Methods For Estimating The Chronic Tosacity of Efficients and Keonving Water to Freshwater Organizms	Short-Term Methods For Estimating The Chronic Topicity of Efficients and Receiving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Testin Efficients and Reserving Water to Freshwater Organia	
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994	
Page number(s)	144 - 189	144 - 189	144 - 189	
c. Give the sample collection method(s) used. For multiple	grab samples, indicate the number of	grab samples used.	W OF A TO	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite	
Grab				
d. Indicate where the sample was taken in relation to disin	fection. (Check all that apply for each)		THE PERSON NAMED IN COLUMN 1	
Before disinfection				
After disinfection				
After dechlorination		9 W	8 -	
e. Describe the point in the treatment process at which the	e sample was collected.	127 mar 1	Time 17 17	
Sample was collected:	Downstream from all plant additions	Downstream from all plant additions	Downstream from all plant addit	
f. For each test, include whether the test was intended to	the result of the first of the second of the	ATTACAMENT AND ADDRESS OF THE ADDRES		
Chronic toxicity	-	-	-	
Acute toxicity	2000	TO MAKE DE PRIME	Alle ele el	
g. Provide the type of test performed.			Milk To July	
Statio				
Static				
Static-renewal	_	_	_	
		_		
Static-renewal				
Static-renewal Flow-through	pe; if receiving water, specify source.			
Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type				
Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type Laboratory water	pe; if receiving water, specify source. Synthetic Moderate Hard Water	Synthetic Moderate Hard Water		
Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify tyl Laboratory water Receiving water	pe; if receiving water, specify source. Synthetic Moderate Hard Water	Synthetic Moderate Hard Water		
Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify type Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" or	pe; if receiving water, specify source. Synthetic Moderate Hard Water type of artificial sea salts or brine used	Synthetic Moderate Hard Water	Synthetic Moderate Hard W	
Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify tyl Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" or Fresh water	pe; if receiving water, specify source. Synthetic Moderate Hard Water type of artificial sea salts or brine used	Synthetic Moderate Hard Water	Synthetic Moderate Hard W	
Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify by Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" or Fresh water Salt water	s in the test series.	Synthetic Moderate Hard Water	Synthetic Moderate Hard W	
Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify by Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" or Fresh water Salt water	s in the test series.	Synthetic Moderate Hard Water 0.00 0.16	Synthetic Moderate Hard W	
Static-renewal Flow-through h. Source of dilution water. If laboratory water, specify by Laboratory water Receiving water i. Type of dilution water. It salt water, specify "natural" or Fresh water Salt water	s in the test series.	Synthetic Moderate Hard Water	Synthetic Moderate Hard W	

Honouliuli WWTP FACILITY NAME AND PERMIT NUMBER: Form Approved 1/14/99 OMB Number 2040-0086 HI 0020877 HO072603 HO082303 HO090803 Test number: Test number: Test number: k. Parameters measured during the test. (State whether parameter meets test method specifications) Yes Yes Yes pH Yes Yes Yes Salinity Yes Yes Yes Temperature Not measured Not measured Not measured Ammonia Yes Yes Yes Dissolved oxygen I. Test Results. Acute: Percent survival in 100% effluent % % % LC50 95% C.I. % % % Control percent survival % % % Other (describe) Chronic: NOEC REPRODUCTION % 2.52 % 2.52 % 2.52 IC25 % % % % % % Control percent survival Other (describe) % % NOEC SURVIVAL 2.52 2.52 % 2.52 m. Quality Control/Quality Assurance. Is reference toxicant data available? Yes Yes Yes Was reference toxicant test within Yes Yes Yes acceptable bounds? What date was reference toxicant test run (MM/DD/YYYY)? 07/06/03 08/02/03 09/01/03 Other (describe) E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

Yes ____ No If yes, describe:

	Test number: HO100803 To	est number: HO110803 Test	number: HOI120803
a. Test information.			
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
age at initiation of test	< 24 hours	< 24 hours	< 24 hours
Outfall number	001	001	001
Dates sample collected	10/07/03 - 10/13/03	11/07/03 - 11/13/03	12/07/03 - 12/13/03
Date test started	10/08/03	11/08/03	12/08/03
Duration	6 days	6 days	6 days
b. Give toxicity test methods followed.			
Manual title	Short-Term Methods For Estimating The Chronic Toursity of Efficients and Receiving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Toxicity of S Efficients and Receiving Water to Freshwater Organisms	hort-Term Methods For Estimating The Chronic Texticity of Effluents and Receiving Water to Freshwater Organisms
Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Page number(s)	144 - 189	144 - 189	144 - 189
c. Give the sample collection method(s) used. For multip	ple grab samples, indicate the number of	grab samples used.	
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab	disconnected in the		
d. Indicate where the sample was taken in relation to di	sinfection. (Check all that apply for each)	
Before disinfection			
After disinfection	The Landson	A STATE OF THE PARTY OF THE PAR	
After dechlorination			J1909
e. Describe the point in the treatment process at which	the sample was collected.	par en gax	ter and the state of
Sample was collected:		s Downstream from all plant additions	Downstream from all plant addit
f. For each test, include whether the test was intended	to assess chronic toxicity, acute toxicity	, or both.	William St. F. F. F.
Chronic toxicity	·	/	
Acute toxicity	A STATE OF THE STA		15.44
g. Provide the type of test performed.			* x h odent
Static			
Static-renewal		-	~
Flow-through			
h. Source of dilution water. If laboratory water, specifi	y type; if receiving water, specify source.		
Laboratory water		ter Synthetic Moderate Hard Water	Synthetic Moderate Hard V
Receiving water			
i. Type of dilution water. It salt water, specify "natural	I" or type of artificial sea salts or brine us	ed.	
Fresh water		-	~
Salt water			
j. Give the percentage effluent used for all concentra	ations in the test series.		
,	0.00	0.00	0.00
	0,16	0.16	0.32
	0,63	0,63	0.63
	1.26	1.26	1.26

ACILITY NAME AND PERMIT NUMBER:	Honouliuli HI 002087		Margaski i		Form Approved OMB Number 2	
	Test number:	HO100803	Test number:	HO110803	Test number:	HOI120803
k. Parameters measured during the test. (State whether	parameter meets	test method specifica	tions)			
рН		Yes		Yes	1.7	Yes
Salinity		Yes		Yes	Yes	
Temperature		Yes		Yes	- 10	Yes
Ammonia	Not	measured	No	t measured	Not	measured
Dissolved oxygen		Yes		Yes		Yes
I. Test Results.						The second
Acute:						
Percent survival in 100% effluent		9	6	%		
LC ₅₀						
95% C.I.		9	6	%		
Control percent survival		0	6	%		
Other (describe)						
Chronic:	7	ALCOHOLD IN				
NOEC REPRODUCTION	2	.52	6 2	2.52 %	6 2	.52
IC ₂₈			%	9/		
Control percent survival		- 10	%	9/	6	
Other (describe) NOEC SURVIVAL	2	.52	%	2.52 %		.52
m. Quality Control/Quality Assurance.				out the state of the state of	M 22	.52
Is reference toxicant data available?		Yes	T	Yes		Yes
Was reference toxicant test within acceptable bounds?		Yes		Yes		Yes
What date was reference toxicant test run (MM/DD/YYYY)?	,	10/02/03	7 7 7	11/01/03		
Other (describe)				control	of control	12/01/03
E.3. Toxicity Reduction Evaluation. Is the treatment wYes	vorks involved in a	Toxicity Reduction E	valuation?			eac dat

Honouliuli WWTP HI 0020877

	Test number: HO011904 Te	est number: HO021504 Test	number: HO030804
a. Test information.			
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
age at initiation of test	< 24 hours	< 24 hours	< 24 hours
Outfall number	. 001	. 001	001
Dates sample collected	01/18/04 - 01/24/04	02/14/04 - 02/20/04	03/07/04 - 03/14/04
Date test started	01/19/04	02/15/04	03/08/04
Duration	6 days	6 days	7 days
b. Give toxicity test methods followed.			
	Short-Term Methods For Estimating The Chronic Totality of Efficients and Recovering Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Totalogy of S Effluents and Keckving White to Freshwater Organisms	host-Term Methods For Estimating The Chronic Toxically of Efficients and Receiving Water to Freshwater Organisms
Manual title Edition number and year of publication	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
	144 - 189	144 - 189	144 - 189
Page number(s) Cive the sample collection method(s) used.	For multiple grab samples, indicate the number of	grab samples used.	ing a start at
	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
24-Hour composite	Automate Flow Composite		4.
Grab	ation to disinfection. (Check all that apply for each		
Before disinfection		11	25 87 8
After disinfection			
After dechlorination	A. A		resident to the least to
e. Describe the point in the treatment proces			Downstream from all plant additi
Sample was collected:		B Downstream from all plant additions	Downstream from an plant additi
f. For each test, include whether the test was	s intended to assess chronic toxicity, acute toxicity	, of both.	_
Chronic toxicity		TANK DARWIN TAXA	THE RESERVE OF THE RE
Acute toxicity	(8 A.A. = -		
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through	W-1		
h. Source of dilution water. If laboratory wa	ter, specify type; if receiving water, specify source.		
Laboratory water	Synthetic Moderate Hard War	ter Synthetic Moderate Hard Water	Synthetic Moderate Hard W
Receiving water			
i. Type of dilution water. It salt water, spec	ify "natural" or type of artificial sea salts or brine us		
. Fresh water		~	-
Salt water			
j. Give the percentage effluent used for all			1 0.00
	0.00 0.16	0.00	0.00
	0.16	0.32	0.32
	0.63	0.63	0.63
······	1.26	2.52	2.52

ACILITY NAME AND PERMIT NUMBER:	Honouliuli HI 002087		die minist	1.31		OMB Number 2040-0086		
	Test number:	HO011904	Test number:	HO021504	Test number:	Test number: HO030804		
k. Parameters measured during the test. (State whether	parameter meets	test method specifica	ations)					
pH		Yes		Yes		Yes		
Salinity .		Yes		Yes		Yes		
Temperature		Yes	Yes		IL.	Yes		
Ammonia	Not	measured	Not measured		Not	measured		
Dissolved oxygen		Yes	Yes			Yes		
I. Test Results.						rail-		
Acute:	- 1,522					507		
Percent survival in 100% effluent			%		%			
LC ₅₀	70.7		70		70			
95% C.I.			%	-	%			
Control percent survival		The state of the s	%		%			
Other (describe)					70			
Chronic:				700		T T		
NOEC REPRODUCTION	2	.52	% 2	.52	% 2	52		
IC ₂₅			%		%			
Control percent survival			%		%			
Other (describe) NOEC SURVIVAL	2	.52	% 2	52	% 2	.52		
m. Quality Control/Quality Assurance.		111111111111111111111111111111111111111	A Arebito	E SEVERO	11 (11)			
Is reference toxicant data available?	e de la laco	Yes	day II	Yes	1 34	110		
Was reference toxicant test within acceptable bounds?	-11.11	Yes		er like to the		Yes		
What date was reference toxicant test run (MM/DD/YYYY)?				Yes		Yes		
Other (describe)		01/05/04		02/02/04	. (3/01/04		

___Yes __ No If yes, describe:

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

FACILITY NAME AND PERMIT NUMBER:

Honouliuli WWTP

	Test number: HO041504 Te	st number: HO051704 Test r	HO060804
a. Test information.			
est species & test method number	C. dubia 1002.0	C. dubia 1002.0	C. dubia 1002.0
ge at initiation of test	< 24 hours	< 24 hours	< 24 hours
utfall number	001	001	001
Physics Communication (Communication Communication Communi	04/14/04 - 04/20/04	05/16/04 -05/22/04	06/07/04 - 06/13/04
ates sample collected	04/15/04	05/17/04	06/08/04
ate test started	6 days	6 days	6 days
b. Give toxicity test methods followed.			
b. Give toxicity test methods followed.	Short-Term Methods For Estimating The Chronic Touchly of Effluents and Receiving Water to Freshwater Organisms	Short-Term Methods For Estimating The Chronic Topicity of Efficients and Receiving Water to Freshwater Organisms	et-Term Methods For Estimating The Chronic Topicity of iffkients and Kecewing Water to Freshwater Organisms
Manual title	Third Edition, July 1994	Third Edition, July 1994	Third Edition, July 1994
Edition number and year of publication	144 - 189	144 - 189	144 - 189
Page number(s)	A CONTRACTOR OF THE CONTRACTOR		(II E 0)
c. Give the sample collection method(s) used. For m			Automatic Flow Composite
24-Hour composite	Automatic Flow Composite	Automatic Flow Composite	Automatic Flow Composite
Grab			
d. Indicate where the sample was taken in relation to	to disinfection. (Check all that apply for each		
Before disinfection			
After disinfection		Marie Control	
After dechlorination			
e. Describe the point in the treatment process at w	hich the sample was collected.	1	
Sample was collected:	Downstream from all plant addition	Downstream from all plant additions I	Downstream from all plant addition
f. For each test, include whether the test was inter	nded to assess chronic toxicity, acute toxicity	, or both.	
Chronic toxicity			
Acute toxicity			at the second second
g. Provide the type of test performed.	The Arthur Land	and the second second	OF SELECTION OF SE
Static			
Static-renewal		_	-
Flow-through			
h. Source of dilution water. If laboratory water, s	pecify type; if receiving water, specify source		
	Synthetic Moderate Hard Wa	ter Synthetic Moderate Hard Water	Synthetic Moderate Hard Wa
Laboratory water	v or an analysis after the sea	Charles and the second	The transfer of
Receiving water i. Type of dilution water. It sait water, specify "na	atural" or type of artificial sea salts or brine us	sed.	
The second secon			~
Fresh water			
Salt water	A. No. 10 the best course		
j. Give the percentage effluent used for all cond	pentrations in the test series.	0,00	0.00
	0,16	0.16	0.16
	0.32	0.32	0.32
	0.63	0.63	1.26
	1.26	2.52	2.52

ACILITY NAME AND PERMIT NUMBER:	Honouliuli HI 0020877		V. dmar	all.	Form Approved OMB Number		
	Test number.	HO041504	Test number:	r: HO051704	Test number:	HO060804	4
k. Parameters measured during the test. (State whether	parameter meets	s test method specif	ications)				
pН		Yes	*1	Yes		Yes	_
Salinity	75	Yes		Yes	The second	Yes	_
Temperature		Yes		Yes		Yes	
Ammonia	Not	measured	N	lot measured	No	ot measured	
Dissolved oxygen		Yes	50.8	Yes	-	Yes	-
I. Test Results.	4 3				=	100	-
Acute:	* 1			1		10.5	Eng.
Percent survival in 100% effluent		100	%		The same		0.8
LC ₅₀	1	or other	%	7	%	A/12	%
95% C.I.	41		%	7			
Control percent survival			%		%	CHIL THUS	. %
Other (describe)		This we	76		%		%
Chronic:	-				2015	V LACTO	
NOEC REPRODUCTION	2	.52	%	2.52 %	% 2	2.72	
IC ₂₅			%		% 2 %	2.52	%
Control percent survival	-1-1-1		%		%	CHILD ACTION	9
Other (describe) NOEC						Surgery, Company	9
m. Quality Control/Quality Assurance.		.32	%	2.52	% 2	2.52	9
Is reference toxicant data available?	1		-	•	Т	10 1154	
Was reference toxicant test within	-	Yes .	PH MITCH	Yes		Yes	
acceptable bounds?	14K PF	Yes	n	Yes		Yes	
What date was reference toxicant test run (MM/DD/YYYY)?	(04/02/04		05/03/04		06/02/04	
Other (describe)				USIUSIUT		06/02/04	-
E.3. Toxicity Reduction Evaluation. Is the treatment weYes NoIf yes, describe:	tion if you have s	Submitted biomoritor		ation or information req	and the cause		
of toxicity, within the past four and one-half years, p	provide the dates	the information was	submitted to the	e permitting authority ar	irding the cause nd a summary of	f the results.	
A CONTRACTOR OF THE CONTRACTOR				-half years, no toxic			
	M/DD/YYYY)	samples usi	ing the 7-day	y Ceriodaphnia dub	bia Survival a	ted in the emit and Reproduct	ion
Summary of results: (see instructions)		method.	-				A Service
	· · · · ·					THE THE	
		91,				565	
	EN	D OF PART					900
PEEER TO THE APRICATION OVEL							
REFER TO THE APPLICATION OVER				OTHER PAR	TS OF FO	IRM	
	2A YOU	MUST COM	PLETE.				Ä

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Form Approved 1/14/99 OMB Number 2040-0086

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENE	RAL INFORMATION	V: State of the control of the contr
F.1.	Pretreatment Program	. Does the treatment works have, or is it subject to, an approved pretreatment program?
	X_ Yes	_ No
F.2.	Significant Industrial L users that discharge to t	Isers (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial the treatment works.
	a. Number of non-cat	egorical SIUs3_
	b. Number of CIUs.	
SIGNI	FICANT INDUSTRIA	AL USER INFORMATION:
	the following information for tion requested for each SI	or each SIU. If more than one SIU discharges to the treatment woks, copy question F.3 through F.8 and provide the U.
F.3.	Significant Industrial pages as necessary.	User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional
	Name:	Frito-Lay of Hawaii, Inc.
	Mailing Address:	99-1260 Iwaena Street Aiea, HI 96701
F.4.	Industrial Processes	. Describe all the industrial processes that affect or contribute to the SIU's discharge.
		Processes snack foods for commercial sales.
F.5.	Principal Product(s) SIU's discharge.	and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the
	Principal product(s)	Snack foods.
	Raw material(s)	Grain meal, flour, and oil.
F.6.	Flow Rate.	
2.400	a. Process wastew	ater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per hether the discharge is continuous or intermittent.
	58 <u>,000.00</u> gpd	(X continuous or intermittent)
		stewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system y (gpd) and whether the discharge is continuous or intermittent.
* :	9 <u>.000.00</u> gpd	(X continuous or intermittent)
F.7.	Pretreatment Standa	rds. Indicate whether the SIU is subject to the following:
	a. Local limits	No

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			A TAIL		W 1			
If subje	ct to categorica	pretreatment sta	andards, which o	category and sub	category?			
				No.				IA.
Proble	me at the Treat	ment Works Att	tributed to Was	te Discharged b	v the SIU. has	the SIU caused	or contributed to	any problems
				past three years				

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F.3.	pages as necessary.	User Information. Provide the name and address of each 510 discharging to the treatment works. Submit additional
	Name:	Honolulu Advertiser
	Mailing Address:	4545 Kapolei Parkway Kapolei, HI 96707
F.4.	Industrial Processes	Describe all the industrial processes that affect or contribute to the SIU's discharge.
		Prints daily newspaper. New facility begins production in August 2004. Flows are estimated by discharger.
F.5.	Principal Product(s) SIU's discharge.	and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the
	Principal product(s)	Daily newspaper.
	Raw material(s)	Paper, printing ink and cleaners.
F.6.	Flow Rate.	
		rater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per the discharge is continuous or intermittent.
	15 <u>,300.00</u> gpd	(X continuous or intermittent)
, doc		stewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system y (gpd) and whether the discharge is continuous or intermittent.
	1.700.00 gpd Estimated Flows.	(X continuous or intermittent)
F.7.		ards. Indicate whether the SIU is subject to the following:
	a. Local limits	No
	b. Categorical pretrea	atment standards Yes X No
	If subject to categoric	al pretreatment standards, which category and subcategory?
F.8.		atment Works Attributed to Waste Discharged by the SIU. has the SIU caused or contributed to any problems ence) at the treatment works in the past three years?
	Yes	XNo
	If was describe each	enisode

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г.э.	pages as necessary.	User information. Provide the name and address of each 510 discharging to the treatment works. Submit additional
	Name:	Pepsi Cola Company
	Mailing Address:	99-1325 Halawa Valley Street Halawa, HI 96701
F.4.	Industrial Processes.	Describe all the industrial processes that affect or contribute to the SIU's discharge.
		Processes soft drinks for commercial sales.
F.5.	Principal Product(s) a SIU's discharge.	and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the
	Principal product(s)	Soft drinks.
	Raw material(s)	Syrup concentrate and carbonated water.
F.6.	Flow Rate.	
		ater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per hether the discharge is continuous or intermittent.
	15 <u>,000.00</u> gpd	(\underline{X} continuous or $\underline{\hspace{1cm}}$ intermittent)
		stewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system y (gpd) and whether the discharge is continuous or intermittent.
	4 <u>.000.00</u> gpd	(X continuous or intermittent)
F.7.	Pretreatment Standa	rds. Indicate whether the SIU is subject to the following:
	a. Local limits	X Yes No
	b. Categorical pretrea	tment standards Yes X No
	If subject to categorica	al pretreatment standards, which category and subcategory?
F.8.		tment Works Attributed to Waste Discharged by the SIU. has the SIU caused or contributed to any problems nce) at the treatment works in the past three years?
	Yes	X No
	If you describe each	poleode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED

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PIPELI	NE:
F.9.	RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe?
	Yes X No (go to F.12.)
F.10.	Waste Transport. Method by which RCRA waste is received (check all that apply):
	Truck Rail Dedicated Pipe
F.11.	Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).
	EPA Hazardous Waste Number Amount Units
	LA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE N WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:
F.12.	Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?
	Yes (complete F.13 through F.15. X No
	Provide a list of sites and the requested information (F.13 F.15.) for each current and future site.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A
YOU MUST COMPLETE

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Honouliuli Wastewater Treatment Plant

HI0020877

PART 2: PERMIT APPLICATION INFORMATION

Complete this part if you have an effective NPDES permit or have been directed by the permitting authority to submit a full permit application at this time. In other words, complete this part if your facility has, or is applying for, an NPDES permit.

For purposes of this form, the term "you" refers to the applicant. "This facility" and "your facility" refer to the facility for which application information is submitted.

APPLICATION OVERVIEW - SEWAGE SLUDGE USE OR DISPOSAL INFORMATION

Part 2 is divided into five sections (A-E). Section A pertains to all applicants. The applicability of Sections B, C, D, and E depends on your facility's sewage sludge use or disposal practices. The information provided on this page indicates which sections of Part 2 to fill out.

1. SECTION A: GENERAL INFORMATION

Section A must be completed by all

2. SECTION B: GENERATION OF SEWAGE SLUDGE OR PREPARATION OF A MATERIAL DERIVED FROM SEWAGE SLUDGE

Section B must be completed by applicants who either:

- 1) Generate sewage sludge, or
- 2) Derive a material from sewage sludge

3. SECTION C: LAND APPLICATION OF BULK SEWAGE SLUDGE

Section C must be completed by applicants who either:

- 1) Apply sewage to the land, or
- 2) Generate sewage sludge which is applied to the land by others

NOTE: Applicants who meet either or both of the two above criteria are exempted from this requirement if all sewage sludge from their facility falls into one of the following three categories:

- 1) The sewage sludge from this facility meets the ceiling and pollutant concentrations, Class A pathogen reduction requirements, and one of vector attraction reduction options 1-8, as identified in the instructions, or
- 2) The sewage sludge from this facility is placed in a bag or other container for sale or give-away for application to the land, or
- 3) The sewage sludge from this facility is sent to another facility for treatment or blending.

4. SECTION D: SURFACE DISPOSAL

Section D must be completed by applicants who own or operate a surface disposal site.

5. SECTION E: INCINERATION

Section E must be completed by applicants who own or operate a sewage sludge incinerator.

Form Approved 1/14/99 OMB Number 2040-0086

Honouliuli Wastewater Treatment Plant

HI0020877

pplicants must complete this	section.	
1. Facility Information	a a market profit	一年 第二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十
a. Facility Name	Honouliuli Wastewater Tr	reatment Plant
b. Mailing Address	1000 Uluohia Street, Suite	308
	Kapolei, HI 96707	The state of the s
c. Contact Person	Frank J. Doyle, P.E.	
Title	Director	WIND TRUBETSECON DULLS
Telephone Number	(808) 692-5159	No. of the Paris of the
d. Facility Address (not PO Box)	91-1501 Geiger Road	Commence of the second second second
	Ewa Beach, HI 96706	TEX. TO THE VENT OF THE
e. Is this facility a Class I sludge m	nanagement facility?	Yes X No
5 E - 1114 - 1 - 1 - 1 - 1		
f. Facility design flow rate:	38 mgd	The state of the s
g. Total population served: e. Indicate the type of facility	38 mgd 336,448	
g. Total population served:	336,448	Privately owned treatment works
g. Total population served: e. Indicate the type of facility	ment works (POTW)	Privately owned treatment works Blending or treatment operation
g. Total population served: e. Indicate the type of facility X Publicly owned treati	ment works (POTW)	
g. Total population served: e. Indicate the type of facility X Publicly owned treat Federally owned treat	ment works (POTW)	Blending or treatment operation
g. Total population served: e. Indicate the type of facility X Publicly owned treat Federally owned treat Surface disposal site	ment works (POTW)	Blending or treatment operation
g. Total population served: e. Indicate the type of facility X Publicly owned treat Federally owned treat Surface disposal site	ment works (POTW)	Blending or treatment operation Sewage sludge incinerator
g. Total population served: e. Indicate the type of facility X Publicly owned treat Federally owned treat Surface disposal site Other (describe)	ment works (POTW)	Blending or treatment operation Sewage sludge incinerator ve, provide the following:
g. Total population served: e. Indicate the type of facility X Publicly owned treate Federally owned treate Surface disposal site Other (describe) 2. Applicant Information If the application of the served:	ment works (POTW) atment works	Blending or treatment operation Sewage sludge incinerator ve, provide the following:
g. Total population served: e. Indicate the type of facility X Publicly owned treat Federally owned treat Surface disposal site Other (describe) 2. Applicant Information If the ap a. Applicant Name	atment works (POTW) atment works poplicant is different from abo City and County of Honol	Blending or treatment operation Sewage sludge incinerator ve, provide the following:
g. Total population served: e. Indicate the type of facility X Publicly owned treat Federally owned treat Surface disposal site Other (describe) 2. Applicant Information If the ap a. Applicant Name	atment works (POTW) atment works policant is different from abo City and County of Honol 1000 Uluohia Street, Suite	Blending or treatment operation Sewage sludge incinerator ve, provide the following:
g. Total population served: e. Indicate the type of facility X Publicly owned treate Federally owned treate Surface disposal site Other (describe) 2. Applicant Information If the applicant Name b. Mailing Address	atment works (POTW) atment works pplicant is different from abo City and County of Honol 1000 Uluohia Street, Suite Kapolei, HI 96707	Blending or treatment operation Sewage sludge incinerator ve, provide the following:

e. Should correspondence regarding this permit be directed to the facility or the applicant?

Applicant

FACILITY NAME AND PERMIT NUMBER: Honouliuli Wastewater Treatment Plant HI0020877	Form Approved 1/14/99 OMB Number 2040-0086
A.3. Permit Information	and the second of the second o
a. Facility's NPDES permit number (if applicable):	HI0020877
 b. List, on this form or an attachment, all other Feder or applied for that regulate this facility's sewage sludge 	al, State, and local permits or construction approvals received ge management practices:
Permit Number	Type of Permit
from this facility occur in Indian Country?	storage, application to the land, or disposal of sewage sludge
Yes	X No
If yes, describe:	

- A.5. Topographic Map. Provide a topographic map or maps (or other appropriate map(s) if a topographic map is unavailable) that show the following information. Map(s) should include the area one mile beyond all property boundaries of the facility:

 (Map and Drawings are attached.)
 - a. Location of all sewage sludge management facilities, including locations where sewage sludge is stored, treated, or disposed.
 - b. Location of all wells, springs, and other surface water bodies, listed in public records or otherwise known to the applicant within 1/4 mile of the facility property boundaries.
- **A.6. Line Drawing.** Provide a line drawing and/or a narrative description that identifies all sewage sludge processes that will be employed during the term of the permit, including all processes used for collecting, dewatering, storing, or treating sewage sludge, the destination(s) of all liquids and solids leaving each unit, and all methods used for pathogen reduction and vector attraction reduction.

Honouliuli Wastewater Treatment Plant	HI0020877	760 02047	Ingil tear year	Form Approved 1/14/99 OMB Number 2040-0086
A.7. Contractor Information. Are any generation, treatment, use or disposal			ts of this facility rel	ated to sewage sludge
Yes		X	No	er = 8 c _ p 0

A.8. Pollution Concentrations: Using the table below or a separate attachment, provide sewage sludge monitoring data for the pollutants for which limits in sewage sludge have been established in 40 CFR Part 503 for this facility's expected use or disposal practices. All data must be based on three or more samples taken at least one month apart and must be no more than four and one-half years old.

POLLUTANT	CONCENTRATION (mg/kg dry weight)	ANALYTICAL METHOD	DETECTION LEVEL FOR ANALYSIS
ARSENIC	0.64	ICP/AES	PQL: 0.22 mg/Kg
CADMIUM	0.94	ICP/AES	PQL: 0.02 mg/Kg
CHROMIUM	28	ICP/AES	PQL: 0.05 mg/Kg
COPPER	304	ICP/AES	PQL: 0.11 mg/Kg
LEAD	14.5	ICP/AFS	PQL: 0.07 mg/Kg
MERCURY	1.6	ICP/AES DEMONSTRATE DEMONSTRATE	PQL: 0.04 mg/Kg
MOLYBDENUM	m 4.8 market grids cool and this	ICP/AES	PQL: 0.07 mg/Kg
NICKEL	14.3	ICP/AES	PQL: 0.12 mg/Kg
SELENIUM	4.4	ICP/AES	PQL: 0.18 mg/Kg
ZINC	526	ICP/AES	PQL: 1.16 mg/Kg

FACILITY NAME AND PERMIT NUMBER: Honouliuli Wastewater Treatment Plant HI0020877	Form Approved 1/14/99 OMB Number 2040-0086
A.9. Certification. Read and submit the following certification to determine who is an officer for purposes of this certification and are submitting:	
Part 1 Limited Background Information Packet	X Section A (General Information)
	X Section B (Generation of Sewage Sludge or Preparation of a Material Derived from Sewage Sludge)
	Section C (Land Application of Bulk Sewage Sludge)
	Section D (Surface Disposal)
	Section E (Incineration)
I certify under penalty of law that this document and all attachme accordance with the system designed to assure that qualified penased on my inquiry of the person or persons who manage the information, the information is, to the best of my knowledge and significant penalties for submitting false information, including the	ersonnel properly gather and evaluate the information submitted. system or those persons directly responsible for gathering the belief, true, accurate, and complete. I am aware that there are
Name and official title Frank J. Devle, P.E. (Direct	etor)
Signature Mark Noy 6	Date Signed
Telephone number (808) 692-5159	
Upon request of the permitting authority, you must submissludge use or disposal practices at your facility or identify	t any other information necessary to assess sewage appropriate permitting requirements.

HONOULIULI WASTEWATER TREATMENT FACILITY NPDES PERMIT NO. HI0020877

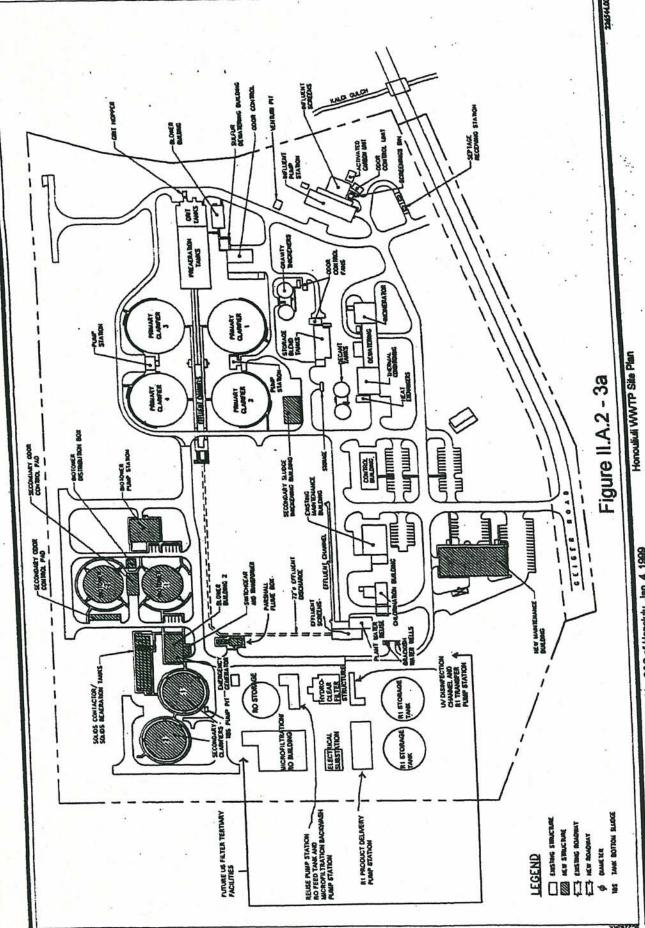
FORM 2S PART 2: PERMIT APPLICATION INFORMATION SECTION A: GENERAL INFORMATION.

A Topographic Map, including area one mile beyond all property boundaries, and Line Drawing, including plant processing units, are provided.

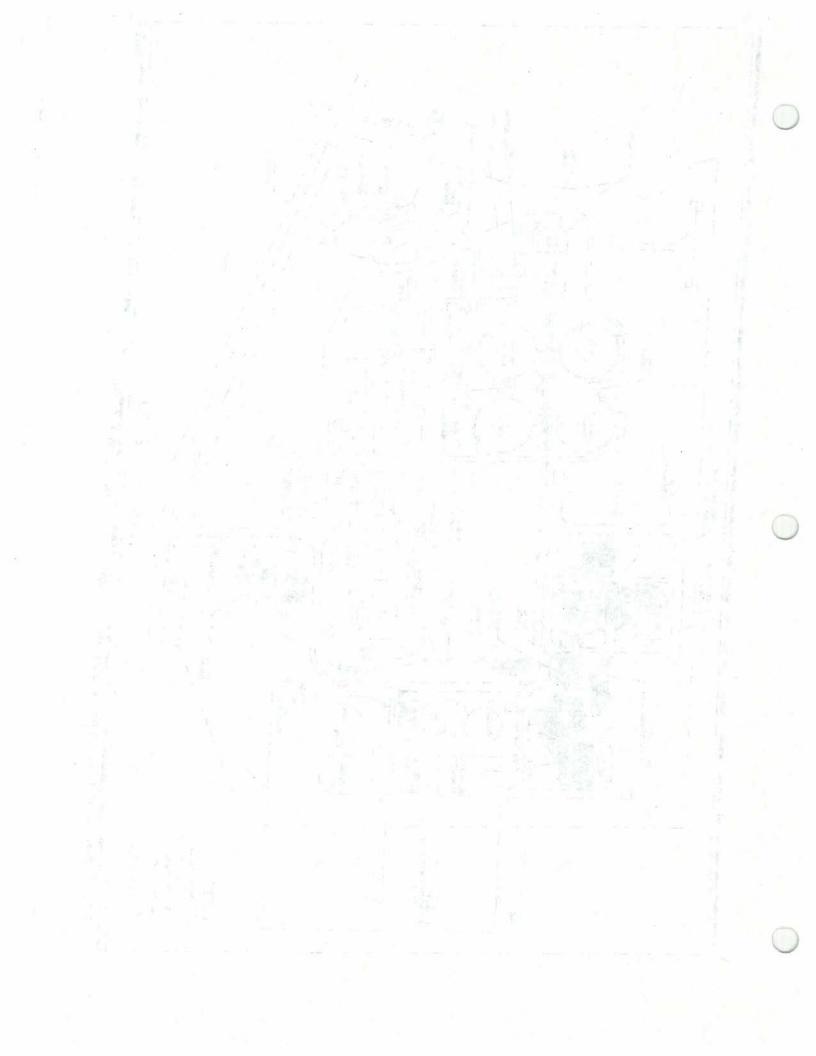
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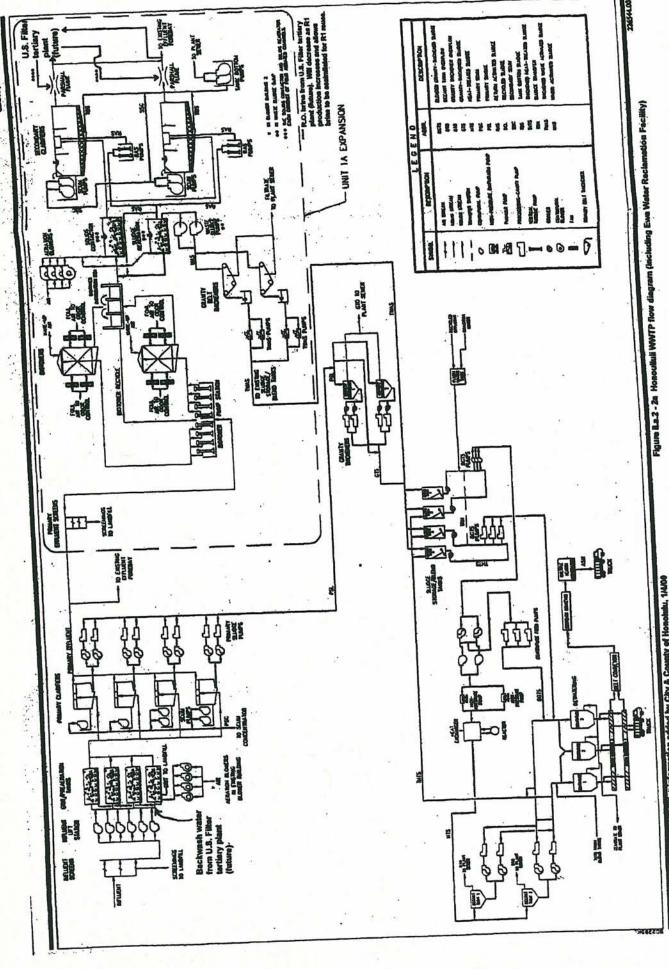
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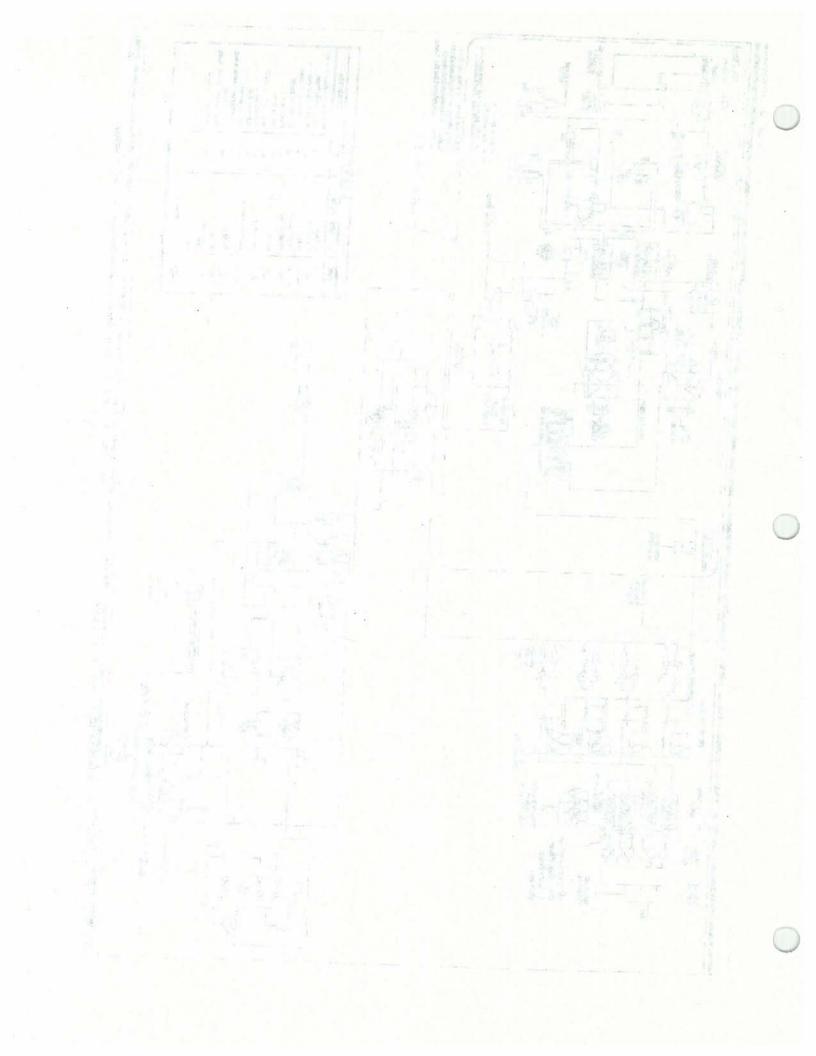
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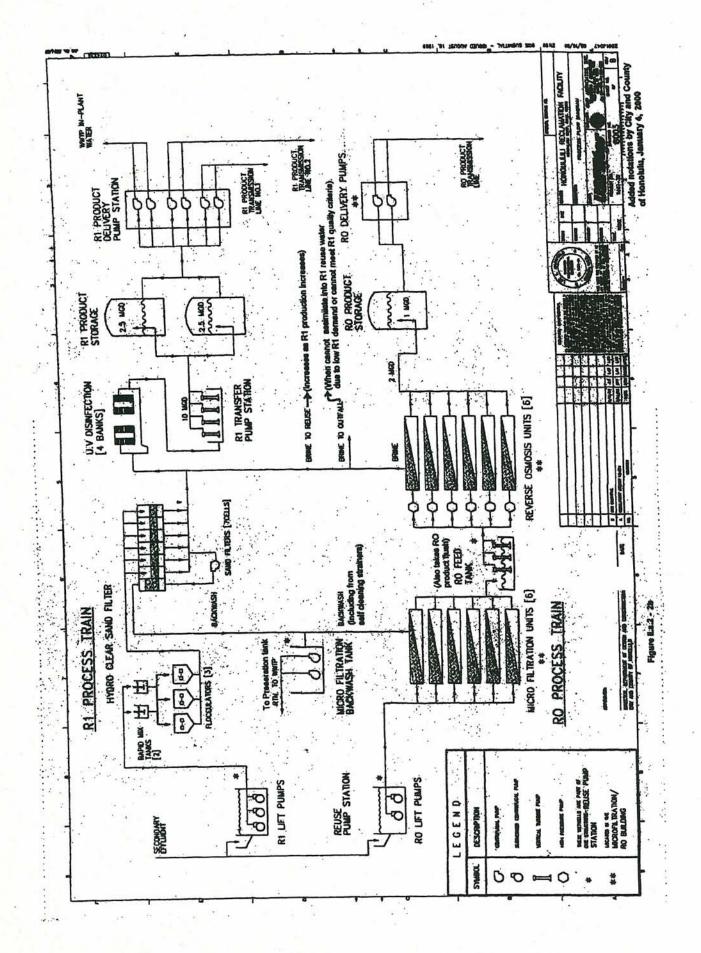


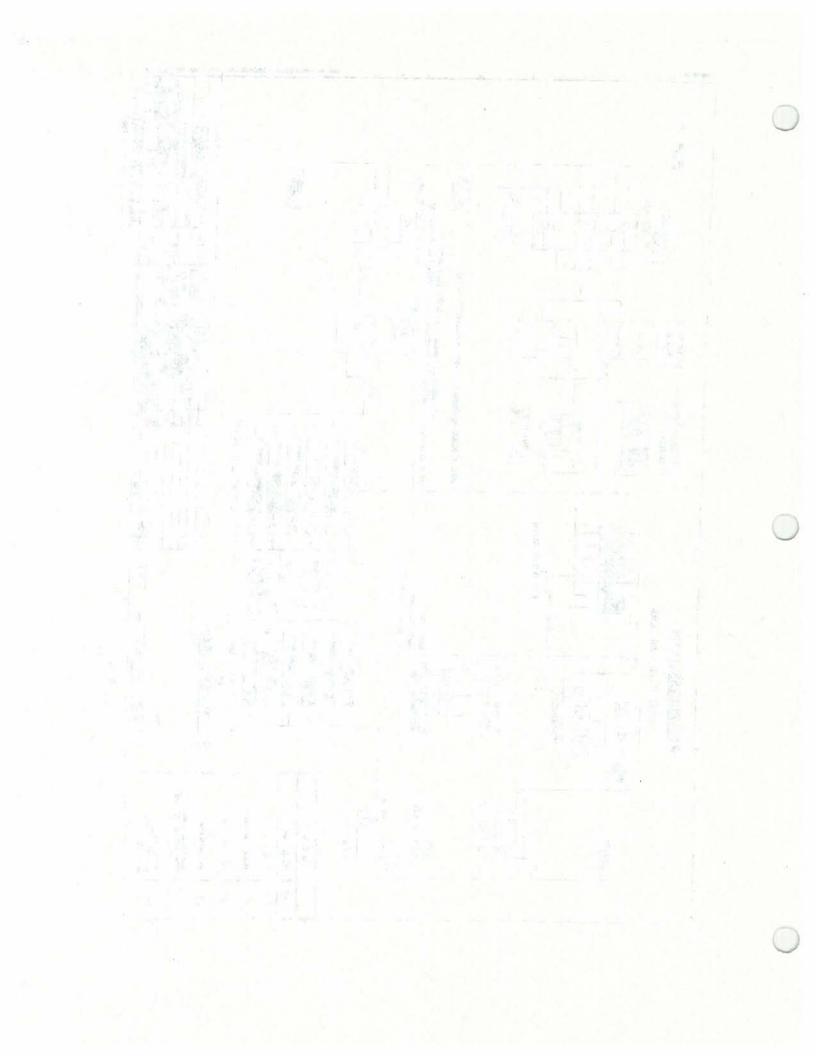
Plus addition of US. Filter Project by C&C of Honolulu, Jan. 4, 1999 CALP ASSOCIATES, BIC. NOVEMBER 1998

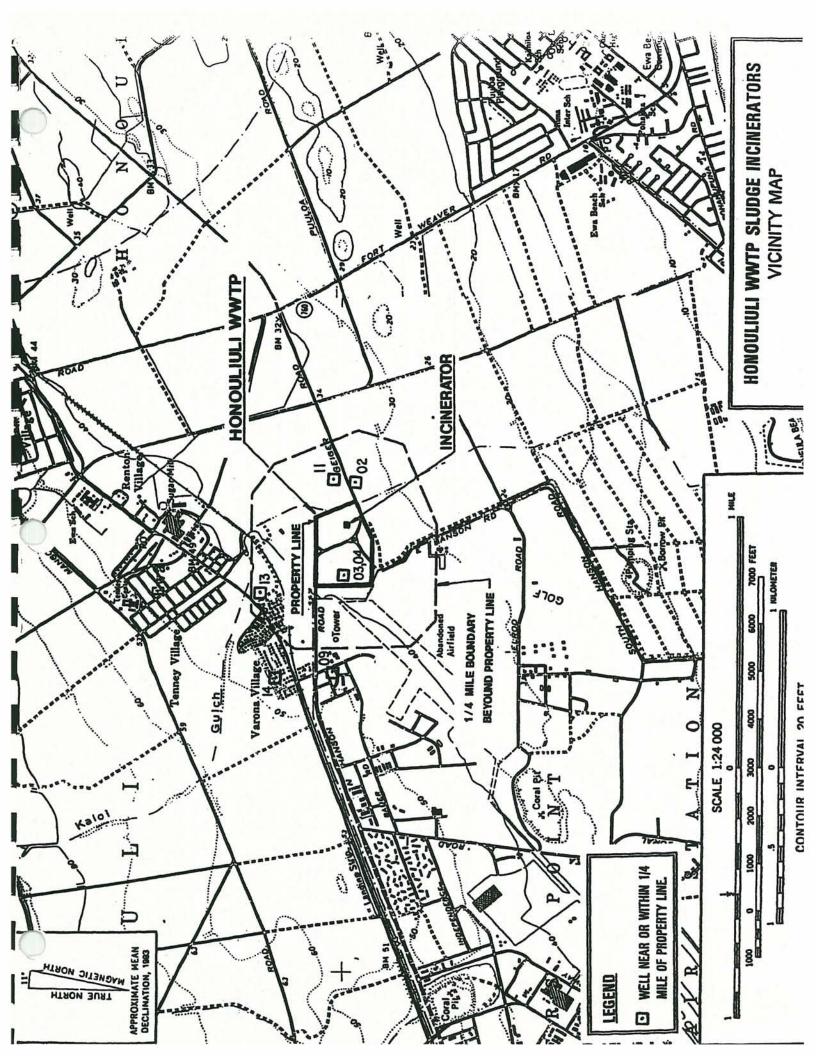


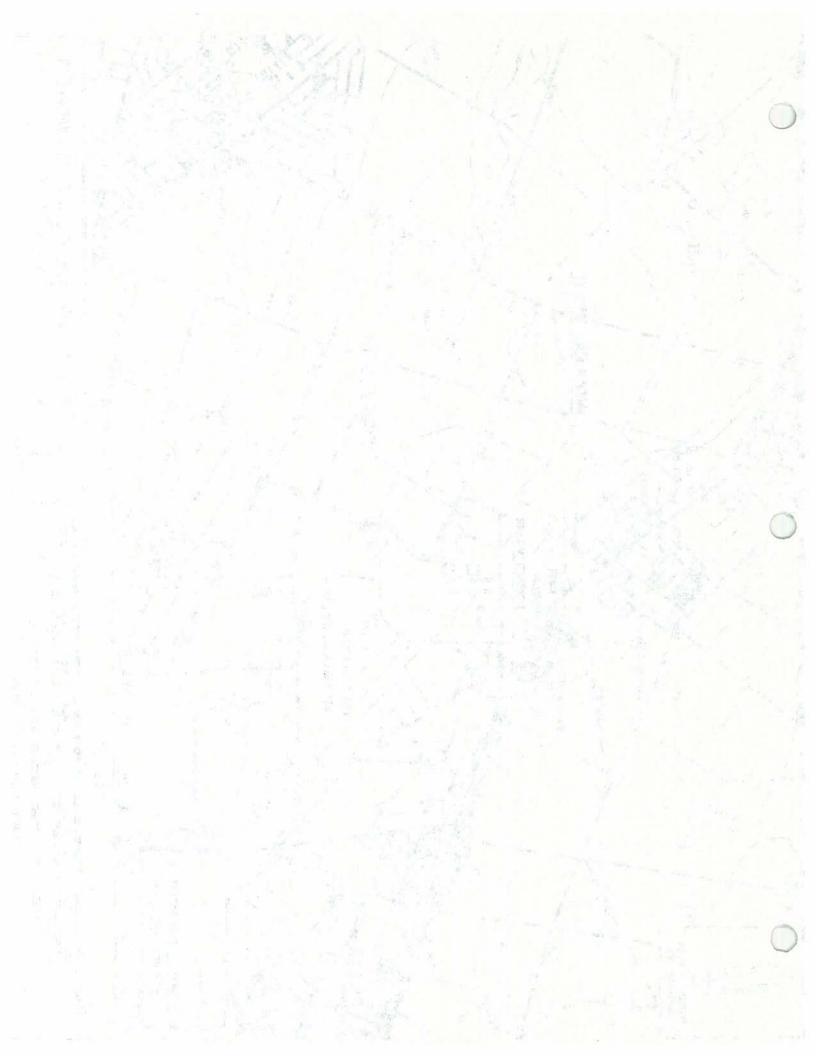












Honouliuli Wastewater Treatment Plant

HI0020877

B. GENERATION OF SEWAGE SLUDGE OR PREPARATION

Complete this section if yo	our facility generates sewage sludge or derives	s a material from s	ewage sludge.
3.1. Amount Generated or	Site		and the same of the
Total dry metric tons per	365-day period generated at your facility:	4,070	dry metric tons
2.2 Amount Bossived from	m Off Site. If your facility receives sewage sludge	from another facility	y for treatment use
or disposal, provide the follo	wing information for each facility from which sewa	ige sludge is receive	
sewage sludge from more th	nan one facility, attach additional pages as necess	ary.	
a. Facility name	Wahiawa Wastewater Treatment Plant	0,60	
b. Mailing address	1000 Uluohia Street, Suite 308	W. Sure T.	
	Kapolei, HI 96707	electric de la company	
c. Contact person	Frank J. Doyle, P.E.	Margaret	
Title	Director	an Mark	
Telephone number	(808) 692-5159	oft and other	
	P.O. Box) 111 California Avenue		
d. Facility address (not F			
e. Total dry metric tons p	Wahiawa, HI 96786 per 365-day period received from this facility: per on another sheet of paper, any treatment proces g activities and treatment to reduce pathogens or v		
e. Total dry metric tons p	Wahiawa, HI 96786 per 365-day period received from this facility: per on another sheet of paper, any treatment process	sses known to occu	r at the off-site
e. Total dry metric tons p	Wahiawa, HI 96786 per 365-day period received from this facility: per on another sheet of paper, any treatment proces g activities and treatment to reduce pathogens or v	sses known to occu	r at the off-site
e. Total dry metric tons p f. Describe, on this form of facility, including blending	Wahiawa, HI 96786 per 365-day period received from this facility: per on another sheet of paper, any treatment proces g activities and treatment to reduce pathogens or v	sses known to occu	r at the off-site
e. Total dry metric tons p f. Describe, on this form of facility, including blending a. Facility name	Wahiawa, HI 96786 per 365-day period received from this facility: pr on another sheet of paper, any treatment proces g activities and treatment to reduce pathogens or v Paalaa Kai Wastewater Treatment Plant	sses known to occu	r at the off-site
e. Total dry metric tons p f. Describe, on this form of facility, including blending a. Facility name	Wahiawa, HI 96786 per 365-day period received from this facility: pr on another sheet of paper, any treatment process g activities and treatment to reduce pathogens or very Paalaa Kai Wastewater Treatment Plant 1000 Uluohia Street, Suite 308	sses known to occu	r at the off-site
e. Total dry metric tons p f. Describe, on this form of facility, including blending a. Facility name b. Mailing address	Wahiawa, HI 96786 per 365-day period received from this facility: per on another sheet of paper, any treatment process g activities and treatment to reduce pathogens or very Paalaa Kai Wastewater Treatment Plant 1000 Uluohia Street, Suite 308 Kapolei, HI 96707	sses known to occu	r at the off-site
e. Total dry metric tons p f. Describe, on this form of facility, including blending a. Facility name b. Mailing address c. Contact person	Wahiawa, HI 96786 per 365-day period received from this facility: per on another sheet of paper, any treatment process g activities and treatment to reduce pathogens or very Paalaa Kai Wastewater Treatment Plant 1000 Uluohia Street, Suite 308 Kapolei, HI 96707 Frank J. Doyle, P.E.	sses known to occu	r at the off-site
e. Total dry metric tons p f. Describe, on this form of facility, including blending a. Facility name b. Mailing address c. Contact person Title Telephone number	Wahiawa, HI 96786 per 365-day period received from this facility: pr on another sheet of paper, any treatment process g activities and treatment to reduce pathogens or visite and treatment and treatment Plant Paalaa Kai Wastewater Treatment Plant 1000 Uluohia Street, Suite 308 Kapolei, HI 96707 Frank J. Doyle, P.E. Director	sses known to occu	r at the off-site
e. Total dry metric tons p f. Describe, on this form of facility, including blending a. Facility name b. Mailing address c. Contact person Title Telephone number	Wahiawa, HI 96786 Der 365-day period received from this facility: Der on another sheet of paper, any treatment process of activities and treatment to reduce pathogens or visite and treatment to reduce pathogens or visite and Uluohia Street, Suite 308 Kapolei, HI 96707 Frank J. Doyle, P.E. Director (808) 692-5159	sses known to occu	r at the off-site
e. Total dry metric tons p f. Describe, on this form of facility, including blending a. Facility name b. Mailing address c. Contact person Title Telephone number d. Facility address (not F	Wahiawa, HI 96786 Der 365-day period received from this facility: Or on another sheet of paper, any treatment process of activities and treatment to reduce pathogens or visite and treatment to reduce pathogens or visite and Uluohia Street, Suite 308 Kapolei, HI 96707 Frank J. Doyle, P.E. Director (808) 692-5159 P.O. Box) 66-1012 Oliana Street	sses known to occu	r at the off-site

in §503.32(a), and one of the vector attraction reduction requirements in § 503.33(b)(1)-(8) and is land applied. Skip this section if sewage sludge from your facility does not meet all of these criteria.

B.4. Preparation of Sewage Sludge Meeting Ceiling and Pollutant Concentrations, Class A Pathogen Requirements, and One of Vector Attraction Reduction Options 1-8.

a. Total	dry metric tons p	er 365-d	day perio	d of sewage s	ludge subject to this section that is applied to	the land:
			0		dry metric tons	

b. Is sewage sludge subject to this section placed in bags or other containers for sale or give-away for application to the land?

Yes

No

FACILITY NAME AND PERMIT NUMBER: Honouliuli Wastewater Treatment Plant HI0020877	Form Approved 1/14/99 OMB Number 2040-0086
Complete Section B.5. if you place sewage sludge in a bag application. Skip this section if the sewage sludge is cover	
B.5. Sale or Give-Away in a Bag or Other Container for App	olication to the Land.
a. Total dry metric tons per 365-day period of sewage sludge sale or give-away for application to the land:	e placed in a bag or other container at your facility for
will be the product of the product o	dry metric tons
b. Attach, with this application, a copy of all labels or notices given away in a bag or other container for application to the	
Complete Section B.6. if sewage sludge from your facility is treatment or blending. This section does not apply to sewage surface disposal site. Skip this section if the sewage sludge sewage sludge to more than one facility, attach additional	age sludge sent directly to a land application or ge is covered in Sections B.4 or B.5. If you provide

Honouliuli Wastewater Treatment Plant

HI0020877

		Navy Public Works Cente	The British Committee of the Committee o	THE RESERVE AND ADDRESS OF THE PARTY OF THE
b. I	Mailing address	Commanding Officer, Nav	y Public Works Center Pea	rl Harbor, Attn: Code 346
		400 Marshall Road, Pear	l Harbor, Hawaii 96860-313	39 (Tax Map Key:9-1-13:60)
c. (Contact person	Terrie Yamamoto		and the vertical land
T	itle	Environmental Engineer	Telephone number	(808) 471-1171
d. ⁻ e. I	Fotal dry metric tons per Citv figure, based on slud Does the receiving facili	365-day period of sewage de truckloads. as reported to E ty provide additional treatme	sludge provided to receiving PA/DOH on 2/19/2004 (EMC on ent to reduce pathogens in s	g facility: 3,900 04-086). sewage sludge from your facility
	X	Yes	no a forest recluing the	No United the Control of the Control
	Which class of pathoge	n reduction is achieved for	the sewage sludge at the re	ceiving facility?
	X Clas	s A	Class B	Neither or Unknown
Doe			uce vector attraction character	istics of the sewage sludge?
	X	Yes	N	No
١			e sewage sludge at your fac	
	Vhich vector attraction r		e sewage sludge at your fac	
	Vhich vector attraction r	eduction option is met for th	e sewage sludge at your fac ction in volatile solids)	
	Vhich vector attraction r Option 1 Option 2	eduction option is met for the (Minimum 38 percent redu	e sewage sludge at your fac ction in volatile solids) ench-scale demonstration)	
	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4	eduction option is met for the (Minimum 38 percent reduction) (Anaerobic process, with be	e sewage sludge at your faction in volatile solids) ench-scale demonstration) ch-scale demonstration)	
	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4	eduction option is met for the (Minimum 38 percent reduction) (Anaerobic process, with beautiful (Aerobic process, with beautiful)	e sewage sludge at your faction in volatile solids) ench-scale demonstration) ch-scale demonstration) te for aerobically digested	
	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4 X Option 5	eduction option is met for the (Minimum 38 percent reduction) (Anaerobic process, with beautiful (Aerobic process, with beautiful (Specific oxygen uptake reduction)	e sewage sludge at your faction in volatile solids) ench-scale demonstration) ch-scale demonstration) te for aerobically digested ised temperature)	
\ 	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4 X Option 5 Option 6	eduction option is met for the (Minimum 38 percent reduction). (Anaerobic process, with beautiful (Appendix of Carobic process, with beautiful (Appendix of Carobic processes plus reduction).	e sewage sludge at your faction in volatile solids) ench-scale demonstration) ch-scale demonstration) te for aerobically digested ised temperature) at 11.5)	
	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4 X Option 5 Option 6 Option 7	eduction option is met for the (Minimum 38 percent reduction). (Anaerobic process, with being (Aerobic process, with being (Specific oxygen uptake ratio). (Aerobic processes plus ratio) (Raise pH to 12 and retain)	e sewage sludge at your faction in volatile solids) ench-scale demonstration) the for aerobically digested dised temperature) at 11.5) unstabilized solids)	
	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4 X Option 5 Option 6 Option 7 Option 8	eduction option is met for the (Minimum 38 percent reduction of (Anaerobic process, with being (Aerobic process, with being (Specific oxygen uptake rate (Aerobic processes plus rate) (Raise pH to 12 and retain (75 percent solids with no	e sewage sludge at your faction in volatile solids) ench-scale demonstration) the for aerobically digested dised temperature) at 11.5) unstabilized solids)	
	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4 X Option 5 Option 6 Option 7 Option 8 None or	eduction option is met for the (Minimum 38 percent reduction). (Anaerobic process, with beautiful (Appendix of (Aerobic processes) uptake respond to 12 and retain (Top percent solids with not 190 percent solids with unsunknown	e sewage sludge at your faction in volatile solids) ench-scale demonstration) the for aerobically digested dised temperature) at 11.5) unstabilized solids) stabilized solids) by treatment processes used e.	cility?
	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4 X Option 5 Option 6 Option 7 Option 8 None or Describe, on this form or educe vector attraction Sludge composted in static	eduction option is met for the (Minimum 38 percent reduction). (Anaerobic process, with beat (Aerobic process, with beat (Specific oxygen uptake reduction). (Aerobic processes plus reduction)	e sewage sludge at your faction in volatile solids) ench-scale demonstration) the for aerobically digested dised temperature) at 11.5) unstabilized solids) stabilized solids) by treatment processes used e.	at the receiving facility to
	Vhich vector attraction r Option 1 Option 2 Option 3 Option 4 X Option 5 Option 6 Option 7 Option 8 None or Describe, on this form or educe vector attraction Sludge composted in static	eduction option is met for the (Minimum 38 percent reduction). (Anaerobic process, with beat (Aerobic process, with beat (Specific oxygen uptake reduction). (Aerobic processes plus reduction)	e sewage sludge at your factor in volatile solids) ench-scale demonstration) ch-scale demonstration) te for aerobically digested ised temperature) at 11.5) unstabilized solids) stabilized solids) y treatment processes used escribed.	at the receiving facility to

FACILITY NAME AND PERMIT NUMBER: Honouliuli Wastewater Treatment Plant HI0020877	Form Approved 1/14/99 OMB Number 2040-0086
h. If you answered yes to (e), (f), or (g), attach a copy of any inf with the "notice and necessary information" requirement of 40 C (Documents and information are attached.) i. Does the receiving facility place sewage sludge from your fac for application to the land?	CFR 503.12(g).
X Yes	No No
Complete Section B.7 if sewage sludge from your facility is a covered in: · Section B.4 (it meets Table 1 ceiling concentrations, Ta requirements, and one of vector attraction reduction opt · Section B.5 (you place it in a bag or other container for · Section B.6 (you send it to another facility for treatments)	able 3 pollutant concentrations, Class A pathogen tions 1-8); <u>or</u> sale or give-away for application to the land); <u>or</u>
B.7. Land Application of Bulk Sewage Sludge.	dry
a. Total dry metric tons per 365-day period of sewage sludge a	pplied to all land application sites: N/A tons
b. Do you identify all land application sites in Section C of this a	
c. Are any land application sites located in States other than the a material from sewage sludge?	e State where you generate sewage sludge or derive
Yes	No
If yes, describe, on this form or another sheet of paper, how yo the land application sites are located. Provide a copy of the no	
	Ed. Will and the
Complete Section B.8 if sewage sludge from your facility is	placed on a surface disposal site.
Complete Section B.8 if sewage sludge from your facility is B.8. Surface Disposal.	placed on a surface disposal site.
Mary IA-La	
B.8. Surface Disposal. a. Total dry metric tons of sewage sludge from your facility pla	aced on all surface disposal sites per 365-day period:

FACILITY NAME AND PERMIT N	JMBER:		Form Approved 1/14/99
Honouliuli Wastewater Treatm	ent Plant HI0020877	y solgen; m	OMB Number 2040-0086
Complete Section B.9 if se	wage sludge from your fac	lity is fired in a sewa	ge sludge Incinerator.
Therefo	re, incinerator data is not provide	ed in this reapplication.)	e used as a sludge disposal alternative. sludge incinerators per 365-day perio
b. Do you own or operate a	all sewage sludge incinerators	in which sewage slud	ge from your facility is fired?
	Yes	X	No
			at you do not own or operate. If you attach additional pages as necessary.
Complete Section B.10 if s	sewage sludge from this fac	ility is placed on a m	unicipal solid waste landfill.
landfill on which sewage slu solid waste landfill, attach a		d. If sewage sludge is	rmation for each municipal solid wast placed on more than one municipal
a. Name of landfill	Waimanalo Gulch Sanitary	Landfill	STREET, STREET
b. Contact person	Joe Hernandez		and the same of th
Title	District Manager, Waste M	anagement of Hawaii	
Telephone number	(808) 668-2985		1
Contact is	Landfill o	owner X	Landfill operator
c. Mailing address	92-460 Farrington Highway	/	<u> </u>
	Kapolei, HI 96707		
d. Location of municipal	solid waste landfill:		THE WAS TRUSTED THE THE TANK AND THE
Street or route #	92-460 Farrington Highway		E 195
County	Honolulu		ing and a relief
City or Town Kapo	lei	State HI	Zip 96707
e. Total dry metric tons of s	ewage sludge from your facility p	laced in this municipal so	olid waste landfill per 365-day period:
170.00	dry metric tons		
- 2	attachment, the numbers of a		and local permits that regulate the
Permit Number		Type of Permit	
I F-0058-02		I andfill Permit	

g. Submit, with this application, information to determine whether the sewage sludge meets applicable requirements for disposal of sewage sludge in a municipal solid waste landfill (e.g., results of paint filter liquids test and TCLP test) See note below)

h. Does the municipal solid waste landfill comply with applicable criteria set forth in 40 CFR Part 258?

No

Paint filter and TCLP test results are attached. Note that not all parameters were not tested in 2003 under the TCLP test. The City plans to redo the test for all parameters as required by the regulations on sludge disposal to a municipal landfill.

HONOULIULI WASTEWATER TREATMENT FACILITY NPDES PERMIT NO. HI0020877

FORM 2S

PART 2: PERMIT APPLICATION INFORMATION
SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE
B.6. Shipment for Treatment or Blending.

The Honouliuli WWTP transports most of the wastewater sludge to the Barbers Point Composting Center for reclamation. The sludge is mixed with City green waste and composted in static aerated piles in accordance with 40 CFR 503 requirements. Upon completion of composting, the recorded date, temperature and pathogen laboratory data are reported to the Hawaii Department of Health for review and approval. As a Class A and Exceptional Quality Biosolid, the product is sold by request forms to available customers. Appropriate records and documents are attached.

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DEPARTMENT OF ENVIRONMENTAL SERVICES Division of Environmental Quality CITY AND COUNTY OF HONOLULU

1000 ULUOHIA STREET, SUITE 303 KAPOLEI, HAWAII 96707

PHONE: (808) 692-5263

FAX: (808) 692-5520





FRANK J. DOYLE, P.E. Director SILVESTRE L. ULEP, P.E. Chief

FAX COVER SHEET

TO:	John Swim	DATE:	June 1, 2004	
	Mokuleia Landscape & Nursery Co.	FAX NO:	637-6890	
FROM:	Ken Kawahara	PHONE:	(808) 692-5377	
BRANCH:	Regulatory Control	FAX NO:	(808) 692-5520	
SUBJECT:	City and County of Honolulu Biosolids	Compost		
			**	
TOTA	AL NUMBER OF PAGES TRANSMITTED	(including cover	r sheet):	

Aloha John,

Thank you for your interest in the City & County of Honolulu's biosolids compost. The process to obtain the biosolids compost is as follows:

- 1. Fill out the top (portion surrounded by the box) of the attached request form.
- 2. Mail request form with original signature to me at the address on this letterhead or hand deliver if we show you the product.
- 3. After approval, I will contact you to schedule a pick-up date and time.
- 4. At the time of biosolids compost pick-up, we will require a check made out to the City & County of Honolulu. Please indicate Biosolids Compost, Sewer Fund on the comment portion of the check. The advertised price of the compost is \$15 per cubic yard.

We appreciate your interest and thank you for helping us in our recycling efforts. Should you have any questions, please call me.

TO THE PURPLEMENT PRINCE OF

REQUEST FOR C&C BIOSOLIDS COMPOST

DDRESS	
	MO
PHONE / FAX / EMAIL	La j
REQUESTOR/POC NAME	
DATE REQUESTED	
DATE NEEDED	QTY NEEDED (CY)
RELEASE:	Q11 (122222 (C1)
Treatment Facility Manager.	rior approval and resubmission of this request form to the Bio
Requestor/poc's signature	
	MENT OF ENVIRONMENTAL SERVICES USE ONLY:
FOR C&C OF HONOLULU, DEPART APPROVED:	MENT OF ENVIRONMENTAL SERVICES USE ONLY:
FOR C&C OF HONOLULU, DEPART	MENT OF ENVIRONMENTAL SERVICES USE ONLY:
FRANK I. DOYLE, P.E.	Date Services
FOR C&C OF HONOLULU, DEPART APPROVED: FRANK J. DOYLE, P.E. Director, Department of Environmental TOTAL QUANTITY (CY) APPROVE	Date Services
FOR C&C OF HONOLULU, DEPART APPROVED: FRANK J. DOYLE, P.E. Director, Department of Environmental TOTAL QUANTITY (CY) APPROVE	Date Services
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FOR C&C OF HONOLULU, DEPART APPROVED: FRANK J. DOYLE, P.E. Director, Department of Environmental TOTAL QUANTITY (CY) APPROVE (CCH, ENV poc is Ken Ka	Date Services Date Awahara at 692-5377, FAX 550-6942 or 692-5520

(BTF poc is Lonnie Felise at 684-1660, FAX 684-1560)

PARCHEST FOR CARCINOSOLIUS COMPOST



July 28, 2003

Mr. R. M. Wakumoto Division Head, Compliance Regional Environmental Department Department of the Navy 517 Russell Avenue, Suite 110 Pearl Harbor, Hawaii 96860-4884

Dear Mr. Wakumoto:

Subject:

Navy Biosolids Treatment Facility

Barbers Point, Oahu

We have reviewed data submitted for compost material from the subject treatment facility. The following compost windrows met the requirements of 40 CFR 503:

1.

20013-010903 (C041202, C041502, C041702, C042202, C042602, and C042902) 23-011603 (C52402, C52802, C52902, C53002, C60302, C60602, and C60502) 26020-120602 (C032602, C032802, C040102, C040302, C040502, C040802, and 2. 3.

6-012703 (C61002, C61102, C61302, C61402, C617602, C61902, and C42402)

Should you have any questions, please contact the Wastewater Branch at 586-4294.

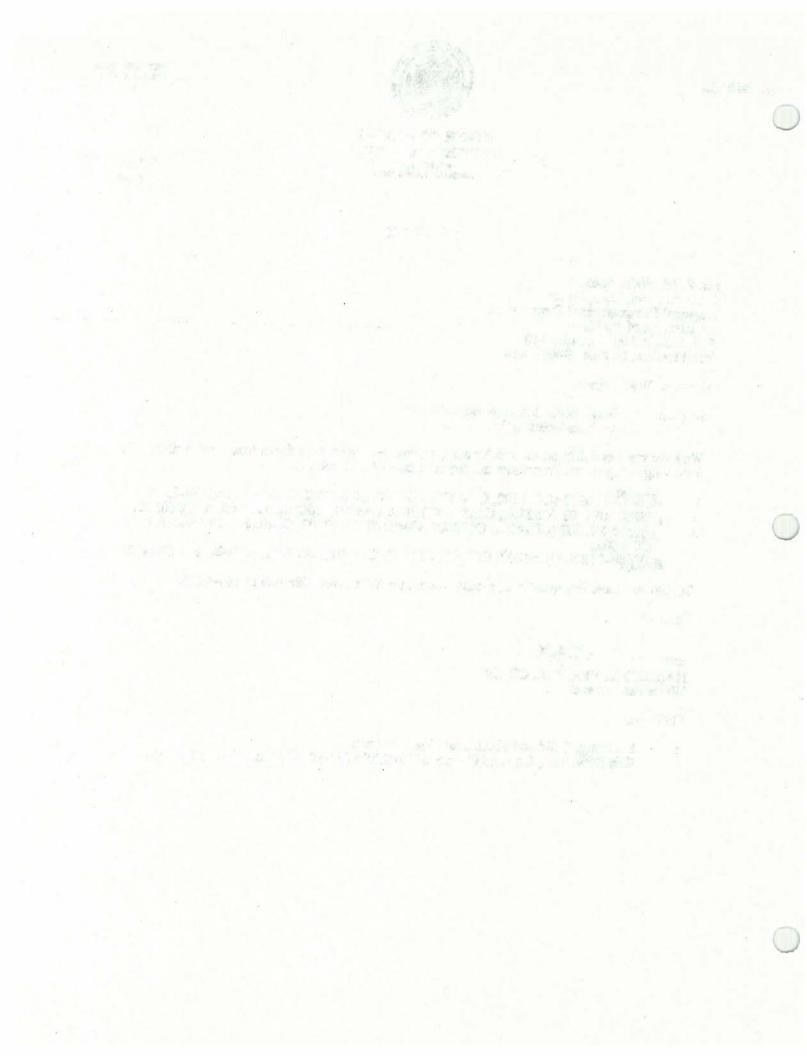
Sincerely,

HAROLD K. YEE, P.E., CHIEF

Wastewater Branch

GST:erm

S. Chang, Solid and Hazardous Waste Branch Ken Kawahara, City and County of Honolulu (Regulatory Compliance Branch) C:



DEPARTMENT OF THE NAVY

COMMANDER
NAVY REGION HAWAII
850 TICONDEROGA ST STE 110
PEARL HARBOR HI 96860-5102

5090 Ser N465/00231 18 JUL 2003

CERTIFIED MAIL NO. 7001 2510 0001 9471 5432

Ms. Gayle Takasaki
Hawaii State Department of Health
Environmental Management Division
Wastewater Branch
919 Ala Moana Boulevard
Honolulu HI 96814

Dear Ms. Takasaki:

SUBJECT: SOLID WASTE MANAGEMENT PERMIT NO. CO-0018-99 NAVY BIOSOLIDS TREATMENT FACILITY LOCATED AT BARBERS POINT, OAHU

As required by Solid Waste Management Permit No. CO-0018-99, Special Condition Number 22, we are submitting to your office the temperature and pathogen laboratory data for compost produced from the City and County of Honolulu biosolids for your review and approval prior to releasing the compost to the City and County of Honolulu.

Enclosed are the temperature logs for seven static aerated piles (C52402, C52802, C52902, C53002, C60302, C60502 and C60602). All of the piles met the time and temperature requirements of 40 CFR 503. These seven piles were combined to form windrow C0023-011603. Also enclosed are the Fecal Coliform Results and Metal Results for windrow C0023-011603. The results show that each of the seven samples had a Fecal Coliform value of less than 1000 MPN and that the compost meets the metal concentration limits for Exceptional Quality Biosolids.

The approximate quantity of compost in windrow C0023-011603 is 350 cubic yards.

Should you have any questions, please contact Ms. Terrie Yamamoto at 471-1171 extension 204.

Nimostor

Director

Regional Environmental Department

By direction of

Commander, Navy Region Hawaii

Enclosures: 1. Temperature data

Pathogen laboratory data

3. Metal laboratory data

Copy to: City and County of Honolulu (Mr. Ken Kawahara)

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STL Seattle

Client Name:

Navy Public Works Center Pearl Harbor

PWC Customer.

STL0076-4 / PWC CODE 351, LF C0023 (011603) METALS - 4 COMP

Sample Description/ID: PWC Lab Sample No.:

03-07725

STL Lab No.: Date Received: 114350-08 6/20/03

Report Date:

6/25/03

Mercury by USEPA Method 7471

Date Prepared: 6/24/03 Date Analyzed: 6/25/03 QC Batch ID: ZS1328

Analyst: DEM

Analyte Mercury Result (mg/kg)

PQL 0.27 Flags

SIL Seattle

Client Name: Navy Public Works Center Pearl Harbor

PWC Customer: STL0076-4 / PWC CODE 351, LF

Sample Description/ID: S120076-47740C CODE 331, EP

PWC Lab Sample No.: 03-07725 STL Lab No.: 114350-08 Date Received: 6/20/03

Report Date: 6/24/03

Metals by ICP - USEPA Method 6010

Date Prepared: 6/23/03 Date Analyzed: 6/23/03 QC Batch ID: SP799 Analyst: KDW

Analyte		(mg/kg)	PQL	Flags
Arsenic	40	ND	2.73	
Cadmium		ND	1.37	
Chromium		35.8	2.73	
Copper		470	2.73	
Lead	14	28	2.73	
Molybdenum		8.24	2.73	
Nickel		21	2.73	
Selenium		. ND	13.7	
Zinc		1220	2.73	



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a palaci

STL Seattle

Client Name:

Navy Public Works Center Pearl Harbor

PWC Customer:

STL0076-4 / PWC CODE 351, LF C0023 (011603) METALS - 2 COMP

Sample Description/ID: PWC Lab Sample No.:

03-07724 114350-07

STL Lab No.: Date Received:

6/20/03 6/25/03

Report Date:

Mercury by USEPA Method 7471

Date Prepared: 6/24/03 Date Analyzed: 6/25/03 QC Batch ID: ZS1328

Analyst: DEM

Analyte Mercury Result (mg/kg)

PQL 0.23 Flags '

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1745-174

Man fine post Man

SIL Seattle

Navy Public Works Center Pearl Harbor Client Name:

STL0076-4 / PWC CODE 351, LF PWC Customer:

Sample Description/ID: C0023 (011603) METALS - 2 COMP 03-07724

PWC Lab Sample No.: 114350-07 STL Lab No .: . Date Received: 6/20/03

Report Date: 6/24/03

Metals by ICP - USEPA Method 6010

Date Prepared: 6/23/03 Date Analyzed: 6/23/03 QC Batch ID: SP799 Analyst: KDW

Analyte	Result (mg/kg)	PQL		Flags
Arsenic	ND	· 2.31		
Cadmium	ND	1.16		
Chromium	33.3	2.31	8	
Copper	316	2.31		e e
Lead	25.7	2.31		
Molybdenum	6.07	2.31	a 9	
Nickel	15.7	2.31		
Selenium	ND	11.6		10 KI
Zinc	948	2.31		

STREET PART CODE 381. L

NAVY PUBLIC WORKS CENTER ENVIRONMENTAL LABORATORY PEARL HARBOR, HAWAII 96860-3139 (808) 474-3704

Report Date: 22 Jun 03

TO: Code 351, Attn: L. Felise

CC: COMNAVREGHI C/N 465, Attn: Terrie Yamamoto

FECAL COLIFORM RESULTS OF FINISHED COMPOST Analytical Method: Appendix F, Control of Pathogens and Vector Attraction in Sewage Studge (EPA/625/R-92/013 - October 1999)

Lab No.	See Below	Date Sampled	17 Jun 03
JON	688-1624	Date/Time Samples Received	17 Jun 03 / 1114
Sampler(s)	L. Abe, C. Imai	Date/Time Samples Processed	17 Jun 03 / 1300

Lab Number	Sample ID	Time Sampled	MPN Fecal Coliform/g
03-07734	FC #1 C0023-011603	0926	< 10

REMARKS:

ANALYST(S): Lucienne M. Abe, Cherie A. Imai

Lucienne M. Abe Microbiologist WINDS OF THE RESERVE OF THE STATE OF THE STA

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NAVY PUBLIC WORKS CENTER ENVIRONMENTAL LABORATORY PEARL HARBOR, HAWAII 96860-3139 (808) 474-3704

Report Date: 06 Jul 03

TO:

Code 351, Attn: L. Felise

CC:

COMNAVREGHI C/N 465, Attn : Terrie Yamamoto

FECAL COLIFORM RESULTS OF FINISHED COMPOST

Analytical Method: Appendix F, Control of Pathogens and Vector Attraction in Sewage Sludge (EPA/625/R-92/013 - October 1999)

Lab No.	See Below	Date Sampled	03 Jul 03
JON	688-1624	Date/Time Samples Received	03 Jul 03 / 1000
Sampler(s)	L. Abe, C. Imai	Date/Time Samples Processed	03 Jul 03 / 1040

Lab Number	Sample ID	Time Sampled	MPN Fecal Coliform/g
03-08342	FC #8- C0023-011603	0906	<1
03-08343	FC #7 C0023-011603	0910	<1

REMARKS:

The geometric mean of seven samples is < 2.7.

ANALYST(S): Lucienne M. Abe, Cherie A. Imai

Lucienne M. Abe
Microbiologist

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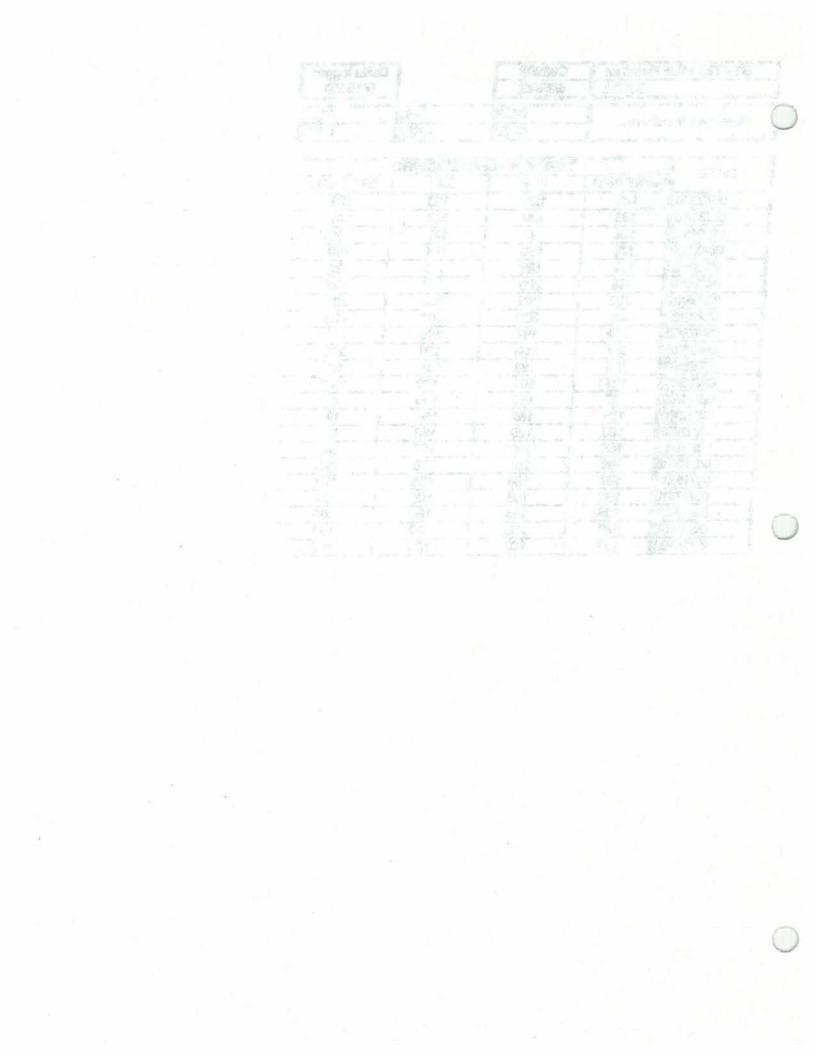
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DATE:	5/29/02		M10459
Manifest Numbers:	C422	C423	C124
Mannest Munipers:	C428	C427	C428

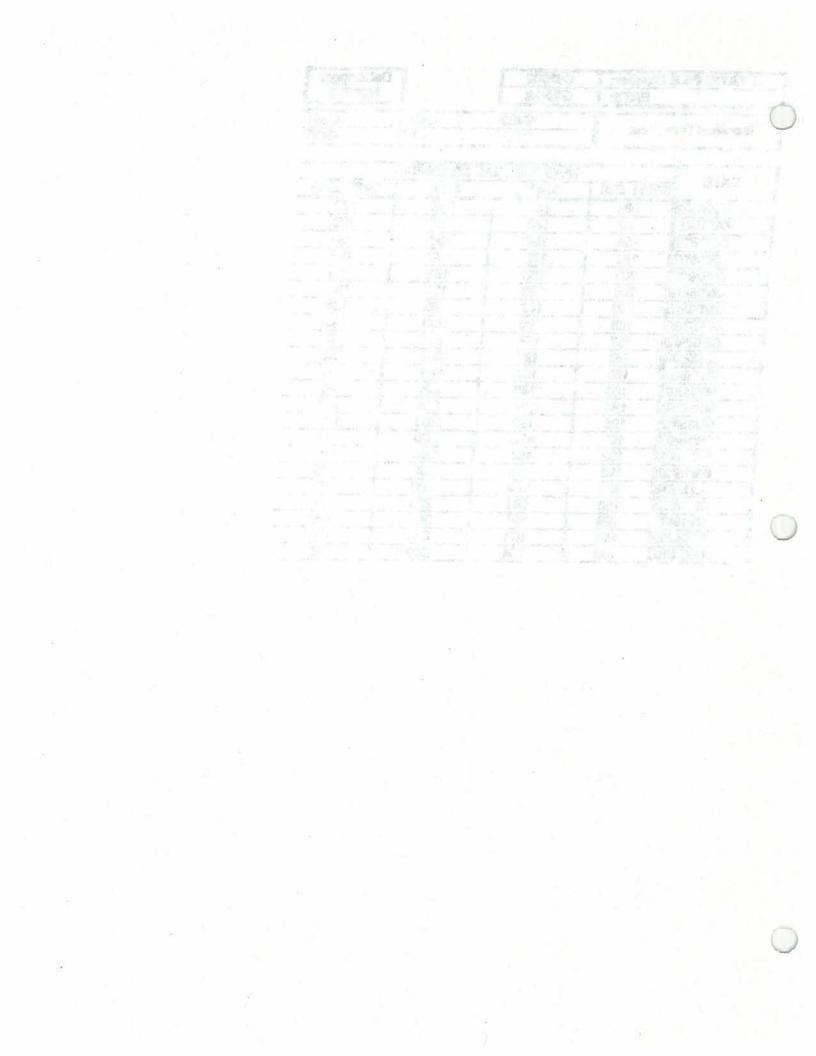
(

DATE	. TEMPERATURE READINGS				
DATE	WEST END	2/4 P	3/4 P	EAST END	
05/30/02	133	125	128	133	
05/31/02	136	138	148	141	
06/01/02	158	171	177	150	
06/02/02	170	180	181	166	
08/03/02	177	186	188	173	
08/04/02	195	203	199	186	
06/05/02	202	202	200	202	
08/08/02	201	200	197	203	
08/07/02	199	197	195	202	
06/06/02		195	193	200	
06/09/02	195	192	191	198	
08/10/02		191	190	197	
08/11/02	192	190	190	196	
06/12/02	2 191	189	189	195	
06/13/0	2 190	189	188	194	
06/14/0	2 189	188	187	193	
08/15/0	2 188	187	.186	193	
08/16/0	2 187	186	186	192	
08/17/0		185	185	191	
06/18/0	CALL THE PARTY OF	183	184	190	
06/19/0	CONTRACTOR OF THE PARTY OF THE	196	199	194	
08/20/0	197	196	199	195	



F	STATIC PILE Number: DATE:	C53002 5/30/02	- [DataLogger M08879
		C429	C430	C431
1	Manifest Numbers:	C433	C434	C435

-	- 15	TEMPERATUR	E READINGS	
DATE	WEST END	2/4 P	3/4 P	EAST END
05/31/02	140	132	133	173
08/01/02		143	134	189
08/02/02	The same of the sa	159	138	193
08/03/02	THE RESERVE TO LABOR.	179	140	191
06/04/0	Name and Address of the Owner, where the Party of the Owner, where the Party of the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner, which i	193	153	188
08/05/0		198	183	186
06/06/0	The second secon	199	198	185
08/07/0	Control of the last of the las	199	200	183
08/08/0	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED	198	201	182
08/09/0	197	197	201	182
08/10/	195	197	201	181
08/11/	02 195	196	201	181
08/12/	02 194	196	201	180
08/13/	02 193	195	200	180
08/14	02 193	196	200	179
08/15	/02 192	195	200	178
06/16	/02 192	195	200	178
08/17	/02 190	194	200	178
08/18		193	200	177
08/19	189	193	200	176
06/2		193	200	175
08/2	1/02 188	194	200	175



STATIC PILE Number: DATE:	C80302 6/3/02	DattaLogger M08678	
	C436	C437	C438
Manifest Numbers:	C440	C441	C442

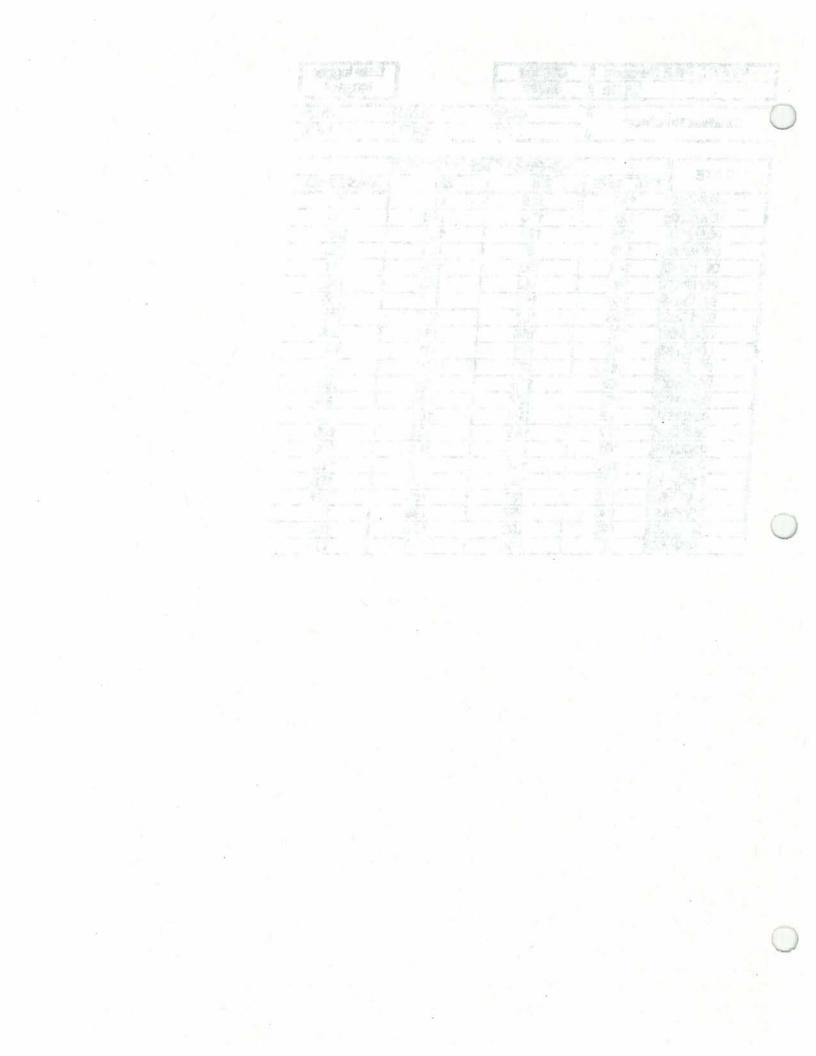
(

-a	T	EMPERATURE	READINGS	10.5
DATE	WEST END	2/4 P	3/4 P	EAST END
08/04/02	138	156	158	144
08/05/02	- 140	176	160	158
06/06/02	141	180	165	170
08/07/02	141	184	179	187
08/08/02	147	187	189	185
08/09/02	158	189	193	184
08/10/02	171	189	195	184
08/11/02	189	189	195	184
08/12/02	198	188	196	184
06/13/02	201	188	197	183
08/14/02	202	187	197	183
08/15/00	2 202	186	197	182
08/16/0	2 202	186	197	181
08/17/0	2 202	185	197	180
06/18/0	2 202	185	198	179
06/19/0	2 202	184	197	179
08/20/0	201	184	197	178
08/21/0	2 201	183	197	177
08/22/	02 201	183	197	176
08/23/	02 201	182	197	176
06/24/	02 202	182	197	175
06/25/	02 201	183	198	176

STATIC PILE Number: DATE:	C60602 6/6/02		Data logger M09518
14-14-ANI	C460	C451	C452
Manifest Numbers:	C464	C455	C458

(

DATE		TEMPERATUR	E READINGS	
DATE	WEST END	2/4 P	3/4 P	EAST END
06/07/02	128	120	. 119	114
08/08/02	- 127	120	120	115
06/09/02	133	125	125	135
08/10/02	139	131	133	156
08/11/02	142	138	139	171
06/12/02	145	142	145	182
08/13/02	150	151	151	190
08/14/02	153	157	156	193
08/15/02	157	164	164	195
06/16/0	2 159	171	172	196
08/17/0	2 163	177	180	196
08/18/0	2 166	183	185	198
08/19/0	2 . 169	187	189	196
06/20/0		190	192	196
08/21/0	177	193	194	195
08/22/0		194	195	195
08/23/		195	197	195
08/24/		198	198	195
06/25/		197	198	194
06/26/	The same of the sa	197	199	194
06/27/	THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	198	199	194
08/28	/02 194	199	199	194



STATIC PILE Number: C60502 Data logger M09885

DATE: 6/3/02 M09885

Manifest Numbers: C443 C448 C448

		TEMPERATUR	E READINGS	
DATE	WEST END	2/4 P	3/4 P	EAST END
08/04/02	141	171	145	148
08/05/02	-146	182	147	153
08/08/02	THE RESERVE THE PARTY OF THE PA	191	151	158
08/07/02		193	158	163
06/08/02		193	165	170
08/09/02		192	179	179
06/10/02	Name and Address of the Owner, where the Party of the Owner, where the Party of the Owner, where the Owner, which is the Own	192	191	187
08/11/02		191	198	193
08/12/0	Name and Address of the Owner, where the Party of the Owner, where the Party of the Owner, where the Owner, which is	190	200	195
08/13/0	THE RESERVE TO SHARE THE PARTY OF THE PARTY	189	200	196
06/14/0	THE RESERVE THE PERSON NAMED IN	188	201	197
08/15/0	THE R. P. LEWIS CO., LANSING, MICH.	186	201	197
08/16/0		186	201	197
08/17/0	Name and Address of the Owner, where the Person of the Owner, where the Person of the Owner, where the Owner, which the Owner, where the Owner, where the Owner, which the Owner	184	201	197
06/18/		183	201	197
08/19/	THE R. P. LEWIS CO., LANSING, MICH.	182	201	197
06/20/	THE RESERVE TO THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL	182	201	197
06/21/		181	201	197
06/22		180	201	197
06/23	STREET, SQUARE, SQUARE	180	201	198
06/24	/02 201	180	200	196
08/25	5/02			



HONOULIULI WASTEWATER TREATMENT FACILITY NPDES PERMIT NO. HI0020877

FORM 2S
PART 2: PERMIT APPLICATION INFORMATION
SECTION B. GENERATION OF SEWAGE SLUDGE OR PREPARATION
OF A MATERIAL DERIVED FROM SEWAGE SLUDGE
B.10. Disposal in a Municipal Solid Waste Landfill.

The Honouliuli WWTP transports a minor portion of the wastewater plant sludge to the Waimanalo Gulch Sanitary Landfill for disposal. Information to determine whether the sewage sludge meets applicable requirements for disposal in a municipal solid waste landfill, paint filter liquids test and TCLP records for 2003, are attached.

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DEPARTMENT OF ENVIRONMENTAL SERVICES CITY AND COUNTY OF HONOLULU DIVISION OF WASTEWATER TREATMENT FAMILIES OF D 1350 SAND ISLAND PARKWAY, HONOLULU, HAWAII 96819 - 4319

"04 JAN 30 A8:19

8:19
FRANK J. DOYLE, P.E.

TIMOTHY A. HOUGHTON DEPUTY DIRECTOR

> EARL W. M. NG ACTING CHIEF

ENVIRONMENTAL SERVICES

MEMORANDUM

January 27, 2004

TP 04-013

TO:

MR. SILVESTRE ULEP, CHIEF

DIVISION OF ENVIRONMENTAL QUALITY

FROM:

EARL W. M. NG, ACTING CHIEF

SUBJECT:

PAINT FILTER TEST RESULTS FOR HONOULIULI

WASTEWATER TREATMENT PLANT FOR 2003

Please find attached the Paint Filter Test results for the year. I certify that our Division has implemented a program under my direction and supervision this past year that was designed to insure that the paint filter test requirements are being met.

If you have any questions, please call Mr. Marcelino Armas at 681-3138, extension 100.

Attachment

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THE REAL PROPERTY AND ADDRESS.



Form 1 Monthly Testing

(Title)

(date)

) art	1. Mont	hly Che	ck	For ea	th sami	ole type	. do a p	aint le fo	filter r Ves	test a	minim A If If	um of ar e test d	nce a r dn't pa	nonth. iss. fer	Indic	ate he
- GIL		<u> </u>		remed	al actio	ns and	follow-u	ıp te	st res	sults i	Part 2					
		Enter Date	Jan 1/3/03		Mar 3/30/83	Apr 4/28/03	May 5/20/03	01	1 7	Jul 20/03	Aug 8/26/03	Sep 9/28/03	Oct /24/03	11/1	10/1	
	- 2000000	er Initials>	100	aa	aa		12000	aa		ea	aa	aa	as	aa	aa	-
	Sludge		Ø/ N	Ø/N	Ø/N	PIN	ØI N	01	N B	NIG	Ø/ N	ØIN	Ø/ N	Ø.N	Ø/ N	
31	Grit		Ø/N.	(3/N	ØI'N	DIN	Ø/N	10	N 6	NIE	Ø/ N	(D) N	Ø N	Ø N	Ø/ N	
	Screen	nings	Ø/ N	Ø/N	Ø/N	MIN	Ø/N	01	N	PIN	Ø N	Ø/N	Ø N	Ø/N	Ø11	1
	Other SEC.	(specify):	Ø/ N	Ø/N	Ø/N	Ø/ N	Ø/N	0	N	PIN	Ø/ N	Ø/ N	Ø N	Ø/ N	Ø 1	4
ample	Description	Remed	dial actio	ns					nitial	100	pling s	Result passe	s 1	Result	1?	passed
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N Y/N	s 1 d?	Pesulti passed Y / N Y / N	1?	Y/N Y/N
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N	s 1 d?	Result passed Y / N	1?	Y/N Y/N Y/N
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N Y/N	s 1 d?	Y/N Y/N	1?	Y/N Y/N Y/N
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N Y/N Y/N	s 1 d?	Y/N Y/N Y/N	1	Y/N Y/N Y/N Y/N Y/N
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N Y/N Y/N Y/N	s 1 d?	Y/N Y/N Y/N Y/N	17	Y/N Y/N Y/N Y/N Y/N Y/N
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N Y/N Y/N Y/N Y/N Y/N	s 1 d?	Y/N Y/N Y/N Y/N Y/N	17	Y/N
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N Y/N Y/N Y/N Y/N Y/N Y/N Y/N Y/N	s 1 d?	Y/N Y/N Y/N Y/N Y/N	1?	Y/N Y/N Y/N Y/N Y/N Y/N
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N	s 1 d?	Y/N Y/N Y/N Y/N Y/N Y/N Y/N	1?	Y/N Y/N Y/N Y/N Y/N Y/N Y/N Y/N Y/N
ample	Description	Remed	dial actio	ns					nitial	100		Result passe Y/N	s 1 d?	Y/N Y/N Y/N Y/N Y/N Y/N Y/N Y/N Y/N	2 2 2 2 2 2	Y/N Y/N Y/N Y/N Y/N Y/N Y/N Y/N

(Signature)

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Honouliuli WWTP

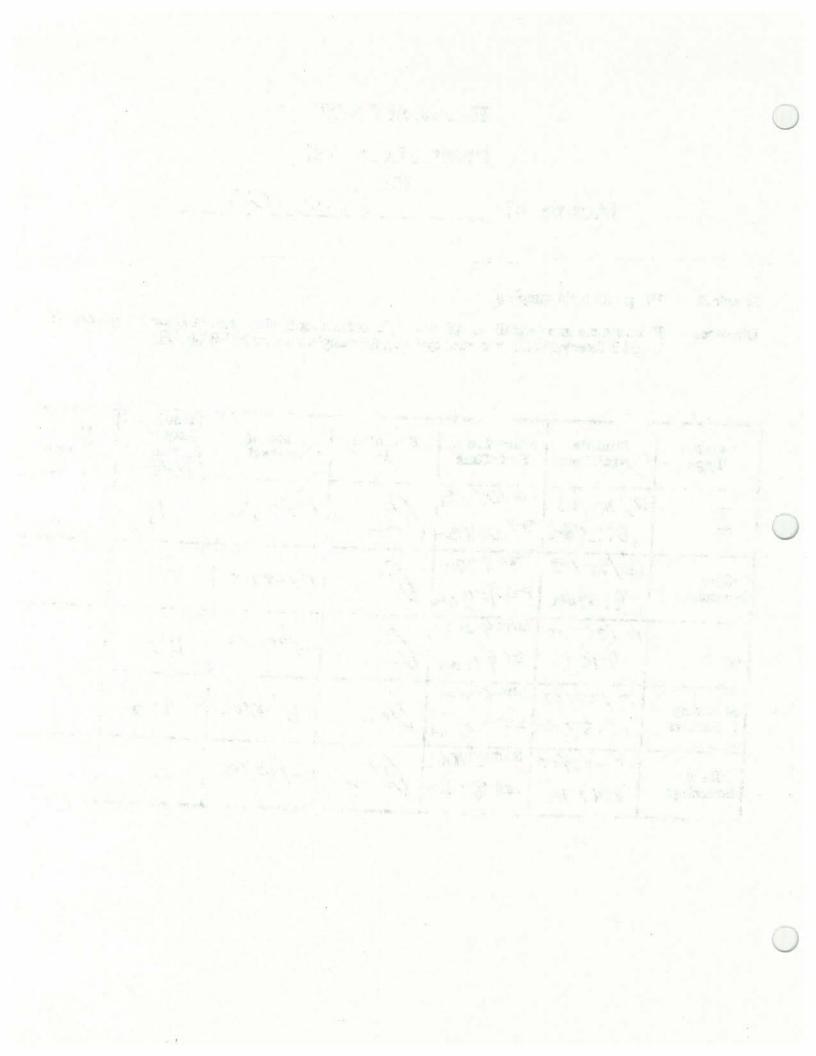
Paint Filter Test for

Dec. Month of

100 g (for solid samples) Sample Size:

Place sample into paint filter. Allow sample to drain for 5 minutes into a graduated cylinder. If liquid is detected in the graduated cylinder, the sample contains <u>FREE LIOUID</u>. Directions:

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS .ke	12/28/03 10:25AM	Stary 0: 2647 End: 10: 31 AL	ale	12/28/03	No	
influent Screenings	. / . /	Start 9:4044 End: 9:45A4		12/28/03	No	
GRIT	12/28/03 9:19AM	Start 9:20 A	1//	12/28/03	No	
Secondary Screenings	12/28/03 8:57 AL	Startog: 58 AF	1 / [-1]	12/28/03	No	1.
Effluent Screenings	12/28/03 8:47 AM	Start: 8:48 A	1///	12/23/03	No	



Honouliuli WWTP

Paint Filter Test for

Month of Nov. 03

Sample Size: 100 g (for solid samples)

Directions: Place sample into paint filter. Allow sample to drain for 5 minutes into a graduated cylinder. If liquid is detected in the graduated cylinder, the sample contains <u>FREE LIOUID</u>.

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS .ke	11/30/03	Start: : 9 P	all	11/30/03	No	
nfluent Screenings	11/30/03	Start: 1:28 P End: 1:33 P	ah	11/30/03	No	
GRIT	1:381	Start /: 39 p End: /: 44 p	1///	11/30/03	No	
Secondary Screenings	1:480	Start /: 497 End: 1:540		11/30/0	No	
Effluent Screenings	11/30/03		1 / /A .	11/20/03	No	1

Paint Filter Test for

Month of

Sample Size: 100 g (for solid samples)

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS ke	1:03 8	Start: 104 End: : 09	ale	10-26-03	No	
Influent Screenings	10-26-03 1:12 P	Start /: 13 P End: /: 18 P	ale	10-26-03	No	
GRIT	1:248	Start /: 25 / End: /: 30 /		10-26-03	No	
Secondary Screenings	10-26-03 1:35P	Start: /: 36 8 End: /: 4/ /	the	10-26-03	No	
Effluent Screenings	1:44	End: /: 45 /	Rhe	10-26-03	No	

Myrather May 70 person as

Paint Filter Test for

Month of

Sample Size: 100 g (for solid samples)

Directions:

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TSke	9-28-03	Start: 7:04 End: 2:09	alm	9-28-03	No	
Influent Screenings	9-28-03	Start /: 33 End: /: 38	ah	9-28-03	No	
GRIT	9-28-03	Start 1:21 End: 1:26	ah	9-28-03	No	
Secondary Screenings	9-28-0	Start: 1:45 End: 1:50	Rhe	9-28-03	No	
Effluent Screenings	9-28-03	Start: /: 55 End: 2:00	1 / 1 /	9-28-03	No	

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N. J				40.14 50.43 E.V.	(a+)
			1 To 1	4-21	

Paint Filter Test for

Month of

Sample Size: 100 g (for solid samples)

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS .ke	8/26/03 7:588M	Start: 7159 PM End: 8:04 PM	1 / //	8/26/03	No	
Influent Screenings	8/26/03 7:13 1M	Start: 7: 14 8M End: 7: 19 8M	ale	8/26/03	No	
GRIT	8/26/03 8:11 PM	Start: 8: 13 M End: 8: 18 M	1/10	8/26/03	No	
Secondary Screenings	8/26/03 8:23 PM	End: 7: 298	1/11	7/26/03	No	
Effluent Screenings	8/26/03 8:36 PM	Start: 8:37 End: 8:42/	m al	8/26/03	NO	

THE TOTAL STATE OF THE STATE OF

Paint Filter Test for

Month of

Sample Size: 100 g (for solid samples)

Directions:

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS .ke	7/20/03	Start: /2:36 End: /2:4/	ale	7/20/03	No	
Influent Screenings	7/20/03	Start /2:53 End: 12:58	alla	7/20/03	NO	
GRIT	7/20/03	Start: 1:12 End: 1:17	Ch	7/20/03	NO	
Secondary Screenings	7/20/03	Start /:0(End: /:06	ah	7/20/03	NO	
Effluent Screenings	7/20/03	Start: /: 23 End: /: 28		7/20/03	NO	

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			201.2	7 14 163	
			7 1 / may 1	96%	
	1. 18. 14.		1000		Meseria.

Paint Filter Test for

June 03 Month of ___

Sample Size: 100 g (for solid samples)

Directions:

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS .ke	6-15-03 8:45AM	Start: 8:46 AM End: 8:51 AM	ale.	6-15-03	No	
nfluent Screenings	6-15-03 8:57 AM	Start: 8:59 End: 9:04M	ale	6-15-03	NO	
GRIT	6-15-03 9:09 AM	Start 9:11 AM End: 9:16 AM	1 /.//	6-15-03	NO	
Secondary Screenings	6-15-03 9:20 AM	Start: 9:21 AF	1 ///	6-15-03	No	
Effluent Screenings	6-15-0= 9:31AM	Start: 9:32A End: 9:37A	1.//	6=15-03	NO	

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Paint Filter Test for

Month of

Sample Size: 100 g (for solid samples)

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS ake	5-20-03 5:16 PM	Start: 5:51 End: 5:56	ahe	5/20/03	No	
Influent Screenings		Start 5:58 End: 6:03	ahe	5/20/03	No	
GRIT	5-20-03 5:13 PM	Start: 6:05 End: 6:10	ah	5/20/03	NO	
Secondary Screenings	5-20-03 5:18PM	1.00	ah	5/20/03	No	
Effluent Screenings	5-20-0	3 Start: 6:20	al	5/20/03	No	

Paint Filter Test for

Month of

Sample Size: 100 g (for solid samples)

Directions:

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS .ke	4-28-03 6:40 PM	Start 6:4/ End: 6:46	ah	4-28-03	No	·
Influent Screenings	4-28-03 6:548M	Start 6:567 End: 7:01 fm	ale	4-28-03	NO	
GRIT	4-28-03 7:05 PM	Start: 7:07 P/ End: 7:12 PM	1///	4-28-03	NO	
Secondary Screenings	4-28-03 7:18PM	Start: 7: 1911 End: 7:248	ahe	4-28-03	NO	
Effluent Screenings	4-28-03 7:31 PM		1 / //	4-28-00	NO	:

Paint Filter Test

for March 03 Month of

Sample Size: 100 g (for solid samples)

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS ake	3/30/03 12:12 PM	Start: 2:/3 PM End: 2:/8 PM	ah	3/30/03	NO	,
Influent Screenings	3/30/03 12:24 PM	A CONTRACT OF STATE O	1 / / / /	3/30/03	NO	
GRIT	3/30/03 R:371M	Start /2:3 9A End: /2:44A	n Ulm	3/30/03	NO	
Secondary Screenings	3/30/03 12:49 PA	Start: 12:50	M alu	3/30/03	NO	
Effluent Screenings	3/30/0: 1.03 PM	Start:: 1:04	PA On	3/30/03	NO	

T. William Catherine

Paint Filter Test for

Month of

Sample Size: 100 g (for solid samples)

Directions:

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS .ke		Start: 7:16 PM End: 7:2 PM		2/25/03	NO	
Influent Screenings	2/25/03 7:278M	Start 7:281 End: 7:339	ale	2/25/03	NO	
GRIT				2/25/03	NO	
Secondary Screenings	7:478	Start: 7:48/	1 Rh	2/25/03	No	
Effluent Screenings	2/25/0	3 Start: 81001 End: 8:057	m Di	2/25/03	NO	

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		MARKET STATE	
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		MOD A 6	April 1985

Paint Filter Test for

Month of

Sample Size: 100 g (for solid samples)

Directions:

Sample Type	Sample Date/Time	Start Time/ End Time	Sampled By	Date of Analysis	Results: Liquid Present? (Yes/No)	If Yes, Volume
TS .ke	8:55 AM 1/3/03	Start: 8:56 AH End: 9:01	ale	1/3/03	NO	
Influent Screenings	9:06 AM 1/3/03	Start 9:07 End: 9:12	alle	1/3/03	No	
GRIT	9:16 AM 1/3/03	Start: 9:17 End: 9:22	ahe	1/3/03	No	
Secondary Screenings	9:26 AM	ATTENDED TO SECURE OF THE SECURE	alu	1/3/03	NO	
Effluent Screenings	9:38 AM	Start: 9:39 End: 9:44	1///	1/3/03	NO	

Environmental Laboratory of the Pacific

Date: 30-Jul-99

ENT: Lab Order: Honouliuli Wastewater Treatment Plant

9907060

Project:

Lab ID:

9907060-01D

Client Sample ID: Comp A,B,C

Tag Number:

Collection Date: 7/11/99

Matrix: SOLID

		Reporting		Dilution	Date	Date	Batch		Qua
Analyses	Result	Limit	Units	Factor	Prepared	Analyzed	ID	Analyst	Note
CORROSIVITY BY PH		SW9045B							
<u>pH</u>	6.4	0.010	pH Units	1	7/12/99	7/12/99	ORN2_990712A	MMM	
FLAMMABILITY		ASTM D49	82-89B					15	
Flammability	NEG	0	Pos/Neg	1	7/15/99	7/15/99	WET_990715A	MMM	
REE LIQUID		SW9095			7				
Free Liquid	NEG	0	Pos/Neg	1	7/21/99	7/21/99	WET_990721A	MMM	
ERBICIDES, TCLP LEACHED		SW1311/8	150						
2,4,5-TP (Silvex)	ND	0.0050	mg/L	1	7/19/99	7/21/99	491	AS	
2,4-D	. ND	0.0050	mg/L	1					
Surr: DCAA	64	40-140	%REC	1					
CP METALS, TCLP LEACHED		SW1311/6	010A						
Arsenic	ND	0.50	mg/L	1	7/16/99	7/16/99	483	TKL	
Barium	ND	1.0	mg/L	1					
Cadmium	ND	0.050	mg/L	1					
Chromium	ND	0.050	mg/L	1					
Lead	ND	0.20	mg/L	1					
Selenium	ND	0.50	mg/L	1					
Silver	ND	0.050	mg/L	1					
RCURY, TCLP LEACHED		SW1311/74	170						
srcury	ND	0.010	mg/L	1	7/16/99	7/19/99	481	KVE	
PESTICIDES, TCLP LEACHED		SW1311/80	A080						
Chlordane	ND	0.0050	mg/L	1	7/16/99	7/28/99	482	AS	
Endrin	ND	0.00050	mg/L	1			2		
gamma-BHC	ND	0.00025	mg/L	1					
Heptachlor	ND	0.00025	mg/L	1					
Heptachlor epoxide	ND	0.00025	mg/L	1					
Methoxychlor	ND	0.0025	mg/L	1					
Toxaphene	ND	0.025	mg/L	1			*		
Surr: Decachlorobiphenyl	. 77	50-150	%REC	1					
Surr. Tetrachloro-m-xylene	53	50-150	%REC	1		060			

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Laboratory of the Pacific

Date: 30-Jul-99

ENT:

Honouliuli Wastewater Treatment Plant

Client Sample ID: Comp A,B,C

Lab Order:

9907060

Tag Number:

Project:

Collection Date: 7/11/99

Lab ID:

9907060-01D

Matrix: SOLID

	n !:	Reporting	Units	Dilution Factor	Date Prepared	Date Analyzed	Batch ID	An	alyst	Qual Notes
Analyses	Result		The same of the sa	Factor	Lieparea					
SEMIVOLATILES, TCLP LEACHED		SW1311/827		1	7/16/99	7/16/99	479		AS	
1,4-Dichlorobenzene	ND	0.050	mg/L mg/L	1	,,,,,,,					
2,4,5-Trichlorophenol	ND		-	1						
2,4,6-Trichlorophenol	ND	0.25	mg/L	1				20		
2,4-Dinitrotoluene	ND	0.050	mg/L	1			1			
Cresols, Total	ND	0.050	mg/L	1	18				**	
Hexachlorobenzene	ND	0.050	mg/L	1						
Hexachlorobutadiene	ND	0.050	mg/L	1	14					
Hexachloroethane	ND	0.050	mg/L	1						
Nitrobenzene	, ND	0.050	mg/L							
Pentachlorophenol	ND	0.050	mg/L	1						
Pyridine	ND	0.050	mg/L	1						
Surr: 2,4,6-Tribromophenol	97	10-123	%REC	1						
Surr: 2-Fluorobiphenyl	66	43-116	%REC	1 1						
Surr: 2-Fluorophenol	43	21-100	%REC	1						
Surr: 4-Terphenyl-d14	88	33-141	%REC	1						
Surr: Nitrobenzene-d5	65	35-114	%REC	1		ě				
Surr: Phenol-d6	33	10-94	%REC	1						
LATILES, TCLP LEACHED		SW1311/82		120			072899	XI.	SUB	
1,1-Dichloroethene	, ND	0.0050	mg/L	1	7/30/99		012099		005	
1,2-Dichloroethane	ND	0.0050	mg/L	1						30
1,4-Dichlorobenzene	ND	0.0050	mg/L	1						· ·
2-Butanone	ND	0.010	mg/L	1						
	ND	0.0050	mg/L	1						
Benzene Carbon tetrachloride	ND	0.0050	mg/L	1						
Chlorobenzene	ND	0.0050	mg/L	1						
	ND	0.0050	mg/L	. 1						
Chloroform Tetrachloroethene	ND	0.0050	mg/L	1						
	ND	0.0050	mg/L	1				39		
Trichloroethene	ND	0.010	mg/L	1						
Vinyl chloride	120	68-144	%REC	1						
Surr: 1,2-Dichloroethane-d4	120		%REC	1						
Surr: 4-Bromofluorobenzene	97		%REC	1						
Surr: Dibromofluoromethane Surr: Toluene-d8	100	\$100 miles	%REC	1						

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

^{* -} Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

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Advanced Technology Laboratori	Advanced	Technology	Laboratorie	3
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Date: OR-Jan-04

CLIENT: Advanced Anal Project; B441	lytical Laboratory, LLC				Lai	Orde	er; O	66505
ab ID: 066505-001				Collecti	on Date:	12/29/	2003	
Client Sample ID: 1					Matrixi	SOIL		
Analyte	Result	POL	Oual	Units		DF	Date	Analyzed
Aualy ic					11	ale		1
CP METALS BY TCLP	tion		D SAME SOLD			2.0		
	(EPA 3010A)		EPA	1311/	6010B			
RunID: ICP2_0401068	QC Batch: 18402				Prepbale		1/8/2004	Analyst: RQ
Arsenio	ND	0,10		mg/L		1		1/8/2004
Barium	0.45	0.10		mg/L		1		1/8/2004
Cadmium	ND	0.10		mg/L		1		1/6/2004
Chromium	ND	0,10	82	mg/L		1		1/8/2004
	ND	0.10		mg/L		1		1/8/2004
Leed Belenium	NO	0.10		mg/L		1		1/6/2004
Silver	ND	0.10		mg/L		1	W.	1/8/2004
MERCURY BY TCLP	488 A 7476\	(EPA	1311/	7470A			
	(EPA 7470)		-				1/8/2004	Analyst: JT
Runid: AA1_040106A	QC Betch: 16406			******	PrepDate		1/0/2004	0 =0
Mercury	ND	0.20		hg/L		1		1/8/2004
Lab ID: 066505-002 Client Sample ID: 4					ion Date: Matrix:	SOIL	•.	. A alumad
Analyte	Result	PQL	Qual	Units		DF	Date	e Analyzed
PH	*							
			I	EPA 90	46C			
RuniD: WETCHEM_0401028	QC Batch: R3380	39			PrepDate	1	1/2/2004	Analyst: MJM
рН	6.21	0.10		pH Ur	Nos	1		1/2/2004
				Collec	tion Date:	12/2	9/2003	*:
Lab ID: 066505-00				-415mg		Control Control		
Client Sample ID: 5					Matrix	POII		* 67 m
Analyte	Result	PQL	Qual	Unit	1	DF	. Dat	e Analyzed
		10.5						
PAINT FILTER				EPA 9	95			
D. III. III. III. III. III. III. III. I	QC Batch: R339	AA.			PrepDate	,		Analyst MJI
RuniD: WETCHEM_040107C	QC Batch: R339	10			· , opposit	-		
Free Liquid	absence		н			1.		1/7/2004
	a i asi			C . Calle	Resover	utelda a	ocepted reco	very limits
A DESCRIPTION AND A DESCRIPTION OF THE PARTY	d at the Reporting Limit							
J - Analyte descent	ed below quantitation limits					-	overy limits	
				115-77 TV025-2000		20100100000	22/19/2020	

Results are wel unless attrewise specified

B - Analyte detected in the associated Method Blank

- Value exceeds Maximum Contaminant Level

B - Value above quantitation range

H-Sample exceeding holding time

The second secon

Male and the second sec

What was to be a second or second or

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ignitability

Advanced'	dvanced Technology Laboratories			Date: 08-Jan-04				
CLIENT: Projecti	Advanced Analy B441	tical Laboratory, LLC		Lab Order:	066505			
Lah ID: Client Sample	066505-004 ID; 6			Date: 12/30/200 fatrix: SOIL	03			
Analyte		Result	PQL Qual Units	DF	Date Analyzed			
FLASHPOINT			EPA 1010					
RuniD: WETCH	HEM2_040106A	QC Batch: R3392	7 F	repDate	Analyst: MFP			

>200

Qualiflern

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B . Analyto detected in the associated Method Blank

a - Value exceeds Maximum Contemiumal Level

S . Spike Recovery guialde accepted resovery limits

1/8/2004

R - RPD outside accepted resovery limits

E - Value above quantitation range

H-Sample exacting holding time

Results are wel unless othewise specified

3 of 3



3 01



Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

AAL Job Number:

A40102-3

Client:

Advanced Analytical Laboratory, LLC

Project Manager:

Elisa Young

Client Project Name:

Honoulluli WWTP

Client Project Number;

B441

Date received:

12/31/03

Analytical Results TCLP 8260, µg/L		14911517			Dupl	RPD
Matrix	Futural	MTHBLK	LCS	2	2	2
	Extract	Extract	Extract	Extract	Extract	Extrac
Date analyzed	Reporting Limits	01/05/04	01/05/04	01/05/04	01/06/04	01/07/04
Dichlorodifluoromethane	1.0	nd		nd	nd	
Chloromethana	1.0	nd		nd	nd	
Vinyl chloride(*)	0.2	nd		nd	nd	
Bromomethane	1.0	nd		nd	nd	
Chloroethane	1.0	nd		nd	nd	
Trichlorofluoromethane	1.0	nd		nd	nd	
1,1-Dichloroethene	1,0	nd		nd	nd	
Methylene chloride	1,0	nd		nd	nd	
rans-1,2-Dichloroethene	1.0	nd		nd	nd	
1,1-Dichloroothane	1,0	nd		nd	nd	
2,2-Dichloropropane	1.0	nd		nd	nd	
cis-1,2-Dichloroethene	1.0	· nd		nd	nd	19
Chloroform	1.0	nd		nd	nd	
1,1,1-Trichloroethana	1,0	nd		nd	nd	
Carbontetrachloride	1.0	nd		nd	nd	
1,1-Dichloropropene	1.0	nd		nd	nd	
Benzene	1.0	nd	87%	1.6		14%
1,2-Dichloroethane(EDC)	1.0	nd	Ø / /Q		1.4	1476
Trichloroethene	1.0		90%	nd	nd	
1,2-Dichloropropane	1.0	nd	8076	nd	nd	
Dibromomethane	1.0	nd		nd	nd	
Bromodichioromethane	1.0	nd		nd	nd	
cis-1,3-Dichloropropene	1,0	nd		nd	nd	
Toluene	1.0	nd	400	nd	nd	
rans-1,3-Dichloropropene	1.0	nd	99%	1.3	1.3	2%
1,1,2-Trichloroethane	1.0	nd		nd	nd	
retrachloroethene	1.0	nd		nd	nd	
1,3-Dichloropropane		nd		nd	nd	
Dibromochloromethane	1.0	nd		nd	nd	
1,2-Dibromoethane (EDB)*	1.0	nd		nd	nď	
Chlorobenzene	0.01	nd		nd	nd	
1,1,1,2-Tetrachloroethane	1.0	nd	98%	nd	nd	
inylbenzene	1.0	nd		nd	nd	555240
kylenes	1.0	nd		2.7	2.5	8%
	1.0	nd		3.7	3.4	8%
lyrene Iromoform	1.0	nd		nd	, nd	
	1.0	nd		nd	nd	
copropylbenzene	1.0	nd		nd	nd	
,2,3-Trichloropropane romobenzene	1.0	nd		nd	nd	
rorriopenzene	1.0	nd		nď	nd	

Advanced Analytical Laboratory (425) 497-0110, lax (425) 497-8089

AAL Job Number:

A40102-3

Client

Advanced Analytical Laboratory, LLC

Project Manager:

Elisa Young

Client Project Name:

Client Project Number;

Date received:

roject Manager:	Elisa Young			
Hent Project Name:	Honouliufi W	MTP		. dela
ilent Project Number;	B441		٠,,	, ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
ate received:	12/31/03	•	Con Car	sample
nalytical Results			(Du

TCLP 8260, µg/L		MTH BLK	LCS	2	2	- 2
Matrix	Extract	Extract	Extract	Extract	Extract	Extrac
Date analyzed	Reporting Limits	01/05/04	01/05/04	01/05/04	01/06/04	01/07/04
1,1,2,2-Tetrachloroethane	1.0	nd		nd	nd	
n-Propylbenzene	1,0	nd		nd	nd	
2-Chlorotolyene	1.0	nd		nd	nd	
4-Chlorotolyena	1.0	nd		nd	nd	
1,3,5-Trimethyfbenzene	1.0	nd		nd	nd	
tert-Butylbenzene	1.0	nd		nd	nd	
1,2,4-Trimethyibenzene	1.0	nd		nd	nd	
sec-Butylbenzene	1.0	nd		nd	nd	
1,3-Dichlorobenzene	1.0	nd		nd	nd	
Isopropyltoluene	1.0	nd		nd	nd	
1,4-Dichlorobenzene	1.0	nd		nd	nd	
1,2-Dichlorobenzene	1.0	nd		nd	nd	
n-Butylbenzene	1.0	nd		nd	nd	
1,2-Dibromo-3-Chloropropane	1,0	nd		nd	nd	
1,2,4-Trichlorobenzene	1.0	nd		nd	nd	
Hexachloro-1,3-butadiene	1.0	. nd		nd-	nd	
Naphthalene	1.0	nd		nd	nd	
1,2,3-Trichlorobenzene	1.0	nd		nd	nd	
*-Instrument detection limits						
Surrogale recoveries						
Dibromofluoromethane		95%	92%	95%	90%	
Toluene-d8		96%	100%	100%	100%	
1,2-Dichloroethane-d4		93%	94%	86%	93%	
4-Bromoffuorobenzene		93%	97%	100%	103%	

Data Qualifiers and Analytical Comments nd - not detected at listed reporting limits Acceptable Recovery limits; 70% TO 130% Acceptable RPD limit: 30%

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Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

AAL Job Number:

A40102-3

Client

Advanced Analytical Laboratory, LLC

Project Manager:

Elisa Young

Client Project Name:

Honouliuli WWTP

Client Project Number:

B441

Date received:

12/31/03

Analytical Results	1.5 mmm(m)				Dupl
8082(PCBs), mg/kg		MTH BLK	LCS	3	3
Matrix	Cardboard	Cardboard	Cardboard	Cardboard	Cardboard
Date extracted	Reporting	12/31/03	12/31/03	12/31/03	12/31/03
Date analyzed	Limits	12/31/03	12/31/03	12/31/03	12/31/03
A1221	5.0	nd		nd	nd
A1232	5,0	nd		nd	nd
A1242 (A1016)	5.0	nd		nd	nd
A1248	5.0	nd		. nd	nd
A1254	5,0	nd		nd	nd
A1260	5.0	nd	79%	nd	nd
Surrogate recoveries:		• 11			
Tetrachloro-m-xylene		99%	94%	85%	86%
Decachloroblphenyl		96%	88%	113%	114%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits

na - not analyzed

C - coelution with sample peaks

M - matrix interference

J - astimated value

Results reported on dry-weight basis

Acceptable Recovery limits: 70% TO 130%

Acceptable RPD limit; 30%

Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

AAL Job Number:

A40102-3

Client:

Advanced Analytical Laboratory, LLC

Project Manager:

Elisa Young

Client Project Name:

Honouliull WWTP

Client Project Number:

B441

Date received:

12/31/03

Analytical Results

Analytical Results		MELLOUM	1.00	
TCLP 8270, μg/L		MTH BLK	LCS	2
Matrix	Extract	Extract	Extract	Extract
Date extracted	Reporting	01/07/04	01/07/04	01/07/04
Date analyzed	Limits	01/07/04	01/07/04	01/07/04
Penatchloroethane	2.0	nd		18
Phenol	2.0	nd		nd
2-Chlorophenol	2.0	nd	102%	nd
Bis (2-chloroethyl) ether	2.0	nd		nd
1,3-Dichlorobenzene	2.0	nd	103%	· no
1,4-Dichlorobenzene	2.0	nd	93%	nd
1,2-Dichlorobenzene	2.0	nd		no
2-Mathylphenol (o-cresol)	2.0	nd	9	8.0
Bls (2-chloroisopropyl) ether	2.0	nd		no
3,4-Methylphenol (m,p-cresol)	2.0	nd		no
2-Nitrophenol	10	nd		· no
2,4-Dimethylphanol	10	nd		no
Bis (2-chloroethoxy) methane	2.0	nd		no
2,4-Dichlorophenol	10	nd		no
1,2,4-Trichlorobenzene	2.0	nd	115%	no
Naphthalene	0,1	nd		no
2,6-Dichlorophenol	10	· nd		h
Hexachloropropylene	10	nd		ne
Hexachlorobutsdiene	10	nd		ne
4-Chloro-3-methylphenol	10	nd	96%	ne
1,2,4,5-Tetrachlorobenzene	2,0	nd	,	ne
Hexachlorocyclopentadiana	2.0	nd		n
2,4,6-Trichlorophenol	10	nd		n
2,4,5-Trichlorophenol	10	nd		ne
2-Chloronaphthalene	2.0	nd		ne
Dimethylphthalate	2.0	nd		h
Acenaphthylene	0.1	nd		ne
Acenaphthene	0.1	nd	103%	ne
2,4-Dinitrophenol	10	nd		ne
4-Nitrophenol	10	nd		D
Pantachlorobenzene	2.0	nd		п
2,3,4,6-Tetrachlorophanol	2,0	nd		n
Fluorene	0.1	nd		n

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Advanced Analytical Laboratory (425) 497-0110, fax (425) 497-8089

AAL Job Number:

A40102-3

Client:

Advanced Analytical Laboratory, LLC

Project Manager:

Elisa Young

Client Project Name:

Honouliuli WWTP

Client Project Number; Date received: B441 12/31/03

Analytical Results

TCLP 8270, µg/L		MTH BLK	LCS	. 2
Matrix	Extract	Extract	Extract	Extract
Date extracted	Reporting	01/07/04	01/07/04	01/07/04
Date analyzed	Limits	01/07/04	01/07/04	01/07/04
Diethylphthalate	10	nd		nd
4-Chlorophenylphenylether	2.0	. nd		nd
N-Nitrosodiphenylamine	2.0	nd		nd
4-Bromophenylphenylether	2.0	nd		nd
Hexachlorobenzane	2.0	nd		nd
Pentachlorophenol	10	nd	83%	nd
Phenanthrene	0.1	nd		nd
Anthracene	0.1	nd		nd
2-sec-Butyl-4,6-dinitrophenol	10	nd		nd
Di-n-butylphthalate	2.0	nd		nd
Fluoranthene	0.1	nd		nd
Ругепа	0.1	nd	104%	nd
Butylbenzylphthalate	10	nd		nd
Benzo(a)anthracens	0.1	nd		nd
Chrysene	0.1	nd		0,60
Bis (2-ethylhexyl) ether	2.0	nd		nd
Di-n-octylphthalate	10	nd		nd
Benzo(b)fluoranthene	0.1	nd		nd
Benzo(k)fluoranthene	0.1	nd		nd
Benzo(a)pyrene	0.1	nd		nd
Dibanzo(a,h)anthracene	0.1	nd		nd
Benzo(ghl)perylene	0.1	nd		nd
Indeno(1,2,3-cd)pyrene	0.1	nd		nd
Surrogate recoveries				
Nitrobenzene-d5		117%	113%	130%
2-Fluorobiphenyl		107%	122%	C
4-Terphenyl-d14		129%	116%	0

Data Qualifiers and Analytical Comments
nd - not detected at listed reporting limits
Acceptable Recovery limits: 70% TO 130%
Acceptable RPD limit: 30%

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