### October 6, 2005

Phone: 310.615.6342

FAX: 310.615.6060

Mr. John Bishop, P.E. Executive Officer California Regional Water Quality Control Board, Los Angeles Region ATTN: Technical Support Unit 320 W. 4<sup>th</sup> Street, Suite 200 Los Angeles, CA 90013

SUBJECT:

Submittal of NPDES Permit Renewal Application

NPDES Permit No. CA0001171

Mr. Bishop,

Attached please find the Application for the Renewal of the NPDES Permit for the Long Beach Generating Station. The submittal of the Application for Renewal is in compliance with the requirements as set forth in the NPDES Permit Number CA0001171, California Regional Water Quality Control Board, Los Angeles Regional Order Number 01-079, covering waste discharged at Long Beach Generation LLC. Please refer this to compliance file CI No. 5764.

Analysis were conducted at a laboratory certified for such analysis by the State Department of Health Services or approved by the Executive Officer and in accordance with current EPA guidance procedures or as specified in the Monitoring Program.

I certify under the 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 a fine and imprisonment for knowing violations."

Mr. John Bishop, P.E. Submittal of NPDES Permit Renewal Application - Long Beach Generating Station October 6, 2005 Page 2 of 2

If you have any questions please contact Mr. Tim Hemig at (760) 268-4037.

Executed on the 6<sup>th</sup> day of October 2005, at Long Beach Generating Station.

Sincerely,

Long Beach Generation LLC

By: NRG El Segundo Operations Inc.,

It's Authorized Agent

Gregory J. Hughes Regional Plant Manger

**ENCL: Enclosed Attachments** 

### APPLICATION FOR RENEWAL OF NPDES PERMIT FOR THE LONG BEACH GENERATION LLC

Long Beach Generating Station (Permit No. CA0001171)

Submitted To the Los Angeles Regional Water Quality Control Board October 7, 2005

### Table of Contents

Section 1.0	Form 200 and Contributions Disclosure Statement
Section 2.0	EPA Form 1 and Site Maps
Section 3.0	EPA Form 2C and Schemetic Diagram of Water Flow
Section 4.0	EPA Form 2C Plant & Operations Description Historical Monitoring Data Requested Permit Changes
Section 5.0	EPA Form 2C Application Sampling and Analysis Laboratory Report
Section 6.0	EPA Form 2C Business Owner/Operation Identification Manual
Section 7.0	EPA Form 2C Storm Water Pollution Prevention Plan
Section 8.0	NPDES Monitoring Toxicity Evaluation Report Summary
Section 9.0	Regional Water Quality Control Board And Related Correspondence

Los Angeles Regional Water Quality Control Board Order 01-079, Waste Discharge Requirements and NPDES Permit for Long Beach Long Beach Generating Station, expires on April 10, 2006. This application is being submitted for the renewal of the permit.

The following California and Federal application forms are enclosed:

- Signatory and Certification Statement to NPDES Permit Applications
- SWRCB Contributions Disclosure Statement
- SWRCB Form 200
- EPA Form 1
- EPA Form 2C

These applications contain the following Attachments and Appendices:

### **SWRCB FORM 200:**

### Section VI. - Characterization Information and Site Map

Attached to this application are the following U.S. EPA applications:

- Form 1
- Form 2C

These forms and their attachments provide a complete characterization of this facility's NPDES discharge, and include:

- · Water mass balance schematic
- SWPPP
- Site map

### **SWRCB Form 1:**

- Figure 1: Location Map
- Figure 2: Hazardous Materials Locations
- Figure 3: Long Beach Generating Station Map

### **EPA Form 2C**

- Table 1 Intake and Effluent Characteristics Existing Operations EPA Form 2C
- Figure 4 -Schematic of Water Flow
- Description of Long Beach Generating Station's Facilities, Operations and Discharges, including:
  - Plant & Operations Description
    - Table 2 Outfall and Nature of Waste Discharge
  - Historical NPDES Monitoring Data 2001 2004
  - Requested Changes to the Permit
    - Figure 5 New Schematic Diagram of Water Flow Direct Discharge of Low Volume Waste Stream
    - Table 3 Direct Discharge of Low Volume Waste Stream EPA Form 2C
- Application Sampling and Analysis Laboratory Report
  - Existing Operations 24-hour Composite Sampling June 2005
  - Alternate Discharge 24-Hour Composite Sampling July 2005
  - Low Volume Waste Discharge Sampling July/September/October 2005
- Business Owner/Operation Identification Manual
- Storm Water Pollution Prevention Plan
- NPDES Monitoring Toxicity Evaluation Report Summary
- Regional Water Quality Control Board And Related Correspondence

### Section 1.0 Form 200 and Contributions Disclosure Statement

### State of California Regional Water Quality Control Board



Form 200 (6/97)

### APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



A. Facility:	FACILITY IN	VFORMATION	
Name: Long Beach Generation LLC	<del></del>		
Address: 2665 West Seaside Boulevard			
City:	County:	) Carros	
Long Beach	Los Angeles	state: CA	Zip Code: 90802
Roy E. Craft		Telephone Number (310)	615-6342
B. Facility Owner:		1	
Name: Long Beach Generation LLC			Owner Type (Check One) 1. Individual 2. Corporation
Address: 2665 West Seaside Boulevard			Covernmental 4. Partnership
City:	Ta		
Long Beach	State: CA	7 ip Code: 90802	5. Other:
Contact Person:		Telephone Number	: Federal Tax ID:
Roy E. Craft		(310) 615-63	342 41 <b>-</b> 192-9997
C. Facility Operator (The agency or business, not	the person):		
Name:	-		Operator Type (Check One)
NRG EL Segundo Operations Inc.		· · · · · ·	Corporation
301 Vista Del Mar		·	3. Governmental 4. Partnership Agency
city: E1 Segundo	State: CA	zip Code: 90245	i. Other:
Contact Person: Roy E. Craft		Telephone Number:	15-6342
D. Owner of the Land:			
Name: Long Beach Generation LLC			Owner Type (Check One)  Individual 2 XX Corporation
Address: 2665 West Seaside Boulevard			Covernmental 4. Partnership
city: Long Beach	State: CA	Zip Code: 90802	i. Other:
Contact Person: Roy E. Craft		(310) 615	5-6342
E. Address Where Legal Notice May Be Ser	ved:	•	
Address: 301 Vista Del Mar	W-544		
city: El Segundo	state: CA	Zīp Code: 90245	
Contact Person:	I OA	70243 Telephone Number	(210) (15 (2/2
Roy E. Craft	<u> </u>	-	(310) 615-6342
F. Billing Address:			
Address: Vista Del Mar			
El Segundo	State:	7 ip Code: 90245	
Contact Pecson: Roy E. Craft			(310) 615-6342

### CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

### State of California Regional Water Quality Control Board



### APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



### II. TYPE OF DISCHARGE

Check Type of Discharge(s) Described in this	s Application (A <u>or</u> B):
A. WASTE DISCHARGE TO LAN	D X B. WASTE DISCHARGE TO SURFACE WATER
Cooling Water  Mining  Waste Pile	Animal Waste Solids  Land Treatment Unit  Dredge Material Disposal Surface Impoundment Industrial Process Wastewater  X Storm Water  Animal or Aquacultural Wastewater  Biosolids/Residual Hazardous Waste (see instructions)  Landfill (see instructions)  Storm Water
III. LO  Describe the physical location of the facility	CATION OF THE FACILITY .
Facility: 7436-030-812	2. Latitude Facility: 33° 45' 53" Discharge Point:  3. Longitude Facility: 118° 13' 17" Discharge Point:
IV  ☐ New Discharge or Facility	. REASON FOR FILING  Changes in Ownership/Operator (see instructions)
Change in Design or Operation	Waste Discharge Requirements Update or NPDES Permit Reissuance
Change in Quantity/Type of Dischar	ge Other:
Name of Lead Agency: Los Angeles F Has a public agency determined that the proportion of the exemption and the	e name of the agency supplying the exemption on the line below.
ITan a "Nestice of Determination" been filed RR	, Environmental Impact Report, or Negative Deciaration. It no, identity the
Expected CEQA Documents:	_
EIR Negative Declaration	Expected CEQA Completion Date:

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

### State of California Regional Water Quality Control Board



### APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



### VI. OTHER REQUIRED INFORMATION

Please provide a COMPLETE characterization of your discharge. A complete characterization includes, but is not limited to, design and actual flows, a list of constituents and the discharge concentration of each constituent, a list of other appropriate waste discharge characteristics, a description and schematic drawing of all treatment processes, a description of any Best Management Practices (BMPs) used, and a description of disposal methods.

Also include a site map showing the location of the facility and, if you are submitting this application for an NPDES permit, identify the surface water to which you propose to discharge. Please try to limit your maps to a scale of 1:24,000 (7.5' USGS Quadrangle) or a street map, if more appropriate.

## Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below: Attachment 1: Form 200 Section VI (Characterization Information and Site Map) You will be notified by a representative of the RWQCB within 30 days of receipt of your application. The notice will state if your application is complete or if there is additional information you must submit to complete your Application/Report of Waste Discharge, pursuant to Division 7, Section 13260 of the California Water Code.

### VIII. CERTIFICATION

"I certify under penalty of law that this document, including all a direction and supervision in accordance with a system designed to information submitted. Based on my inquiry of the person or person gathering the information, the information submitted is, to the best of that there are significant penalties for submitting false info	assure that qualified personnel properly gathered a ons who manage the system, or those persons direct of my knowledge and belief, true, accurate, and comp	nd evaluated the y responsible for lete. I am aware
Print Name: Gregory J. Hughes	Title: Regional Plant Man	
Signature Megy J. Bush -	Date: 10/5/05	: - <u></u>
Gregøry J. Hughes Regional Plant Manager		9.

Regional Plant Manager Long Beach Generation, LLC by: NRG El Segundo Operations, Inc. Its Authorized Agent

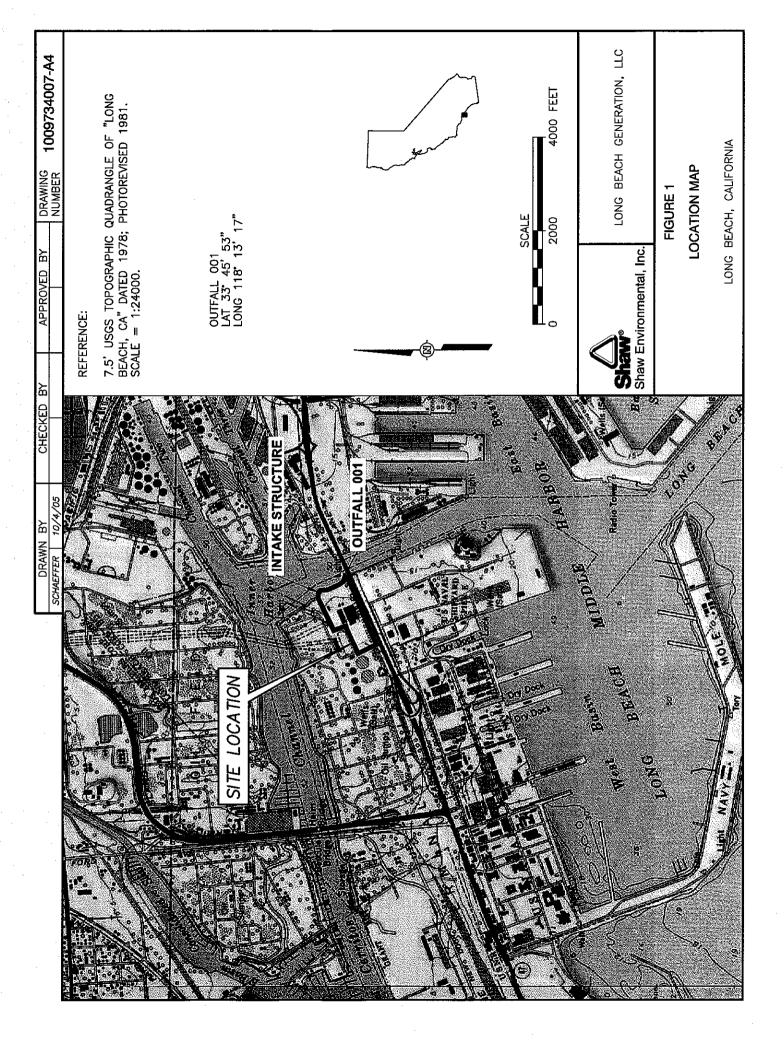
(310) 615-6029

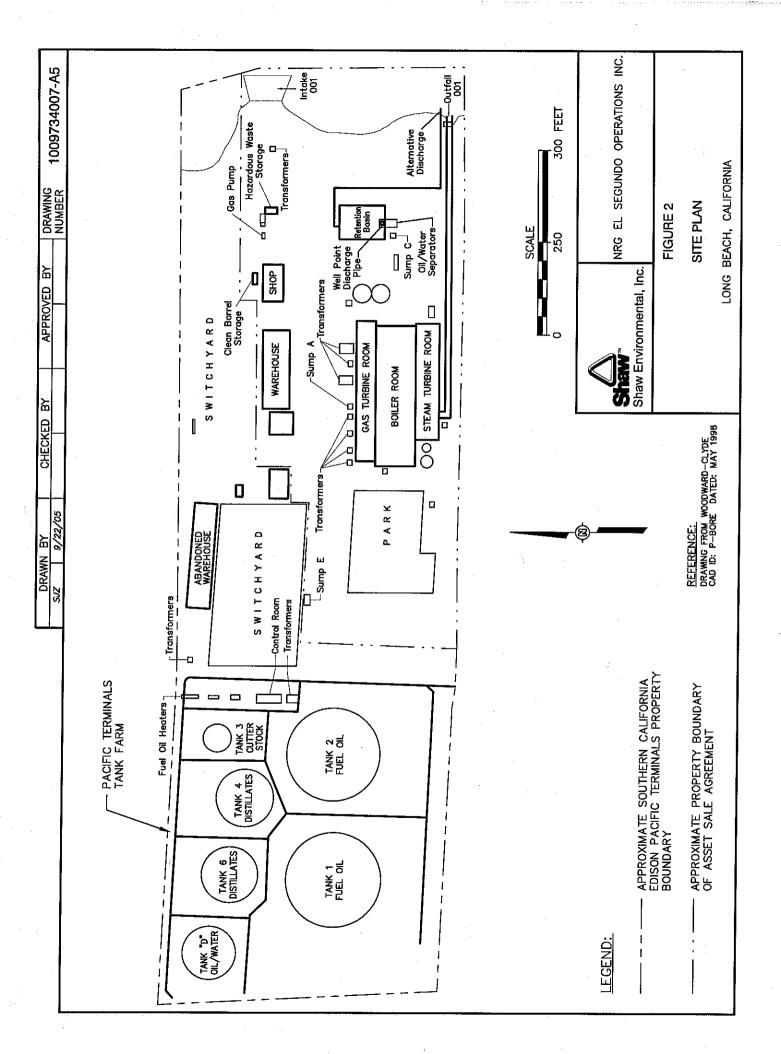
FOR OFFICE USE ONLY			· · · · · · · · · · · · · · · · · · ·	
Date Form 200 Received:	Letter to Discharger:	Fee Amount Received:	Check #:	
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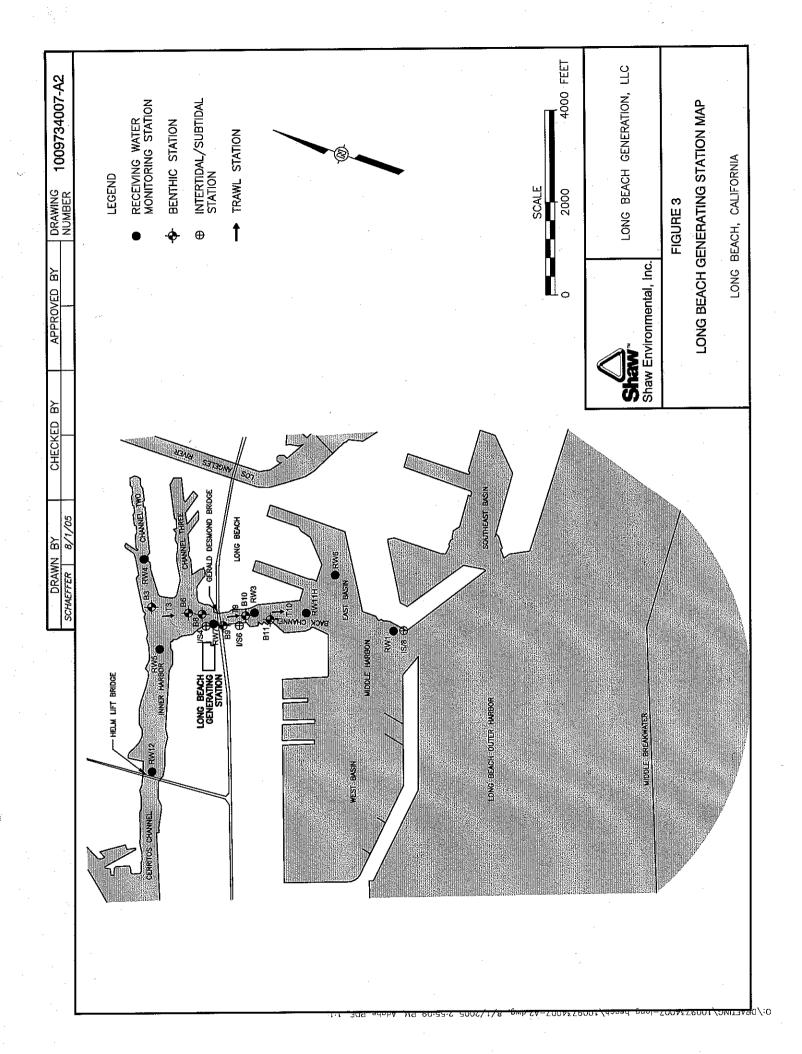
### Section 2.0 EPA Form 1 and Site Maps

FORM 1 GENERA	<b>⊗EPA</b>	GENERAL I Consolidated	L PROTECTION AGENCY NFORMATION Permits Program tructions" before starting.)		CARO00	037705 T/A 6: D
III. FA V. FA AD VI. FA	CILITY NAME CILITY MAILING DRESS ACILITY LOCATION	PLEASE PLACE LABE	LIN THIS SP	ACE s	esignated space. Nov any of it is incorrect, orrect data in the appu- lso, it any of the prep y the left of the label is hould appear), please rea(s) below. If the lat ou need not complete which must be complete ems if no label has be	been provided, affix in the lew the information carefully, ross through It and enter the opnate fill-in area below, inted data is absent (the area pace lists the Information that provide in the proper fill-in pat is complete and correct (lems.) III. V. VI (except VI-B ed repartiess). Complete all em provided. Defer to the Litem descriptions and for the der which this data is
INSTRUCTION INSTRU	the parenthasis following the question. Mai ino it your activity is excluded from permit of SPECIFIC QUESTIONS.  Sithis facility a publicly owned treatment win a discharge to waters of the U.S.? (FOR sales a facility which currently results in disc of the U.S. other than those described in A of FORM 2C).	M-2A) X  Charges () waters  If B bove? X	B. Does or will this fact a concentrated an production facility the U.S.? (FORM 2)  D. Is this a proposad to above, which will receive the U.S.?	wer 'no to each question, yiens for definitions of bold-fa specific QUESTIONS.  They can be susting or proposition of a which results in a discharg growth of the control o	you need not submit a liced terms.  sed) include inquatic animal e to waters of cribad in A or B is of the U.S.7.	om and the supplemental form by of these forms. You may:  MARK:X  FORM.  YES: NO. ATTACHED  X  X
	Does or will this facility freat, store, or disposivantes? (FORM 3).  Do you or will you inject at this facility any protection of the surface conventional oil or natural gas production, in shinanced recovery of all or natural gas, or instorage of liquid hydrocations? (FORM 4). It is this facility a proposed stationary source he 28 industrial categories listed in the instrumit potentially emit 100 fors per year of any equilated under the Clear Air Act and may a cran attainment area? (FORM 5).	X  coursed water or in connection with ject fittinds used for nject fluids for X  which is one of cutions and which air pollutant	effluent below the triguenter mile of the water? (FORM 4).  H. Do you or will you. In processes such as a solution making of a recovery of geother.  L. Is this facility a proof the 28 industrial which will potential.	niech at this facility industrial wernost stratum containing well bore, underground source ject at this facility fluids for mining of sulfur by the Frasci inerals, in situ combustion of matericry? (FORM 4) losed stationery source of categories listed in the instri yemit 250 tons per year of a Clean Air Act and may affer ea? (FORM 5)	within one ses of drinking special hiprocess, at lossifituel or section is NO Fone sections and say an political any air political any air political any air political any air political sections and say air political sec	X X X
C 2.	Long Beach Generation LL ACILITY CONTACT Roy E. Craft, I	A NAME & TITLE (last first & lille Project Manager			8 PHONE (310) 61	(area code & no.) 5–6342
G 3 4 VL F	301 Vista Del Mar  El Segundo  ACIETY LOCATION	8 EITY OR TOWN	FOR P.O. BOX		G. STATE	D. ZIP.CODE 90245
<b>5</b>	2665 West Seaside Boulev Los Angeles	B. GO	JNTY NAME			
G.	C CITY  Long Beach	ORTOWN STORES	D. STATE CA	90802	F. COUNT	Y CODE (If known)

							<u></u>		
VII: SIC CODES (	4-digit, in ord	der of priority) A FIRST					and the second of the second o		
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4911	(specify)	Electric Power Ge	neratio	n	7	ľ	specify)		
	1	G THIRDS S					D FOL	BTH	
<u>C</u>	(specify)				<u>C</u>		specify)		
AND OPERATOR	Neormaei	alver a							
	Constant		A NI	AMERICA STATE			В	Is the name listed in Iter	n VIII-A
G NDC ELS	egundo On	erations Inc.				e management	al	so the owner?	
87.8			Katawa masa			72.V2.V6.2		No	
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				E STREET	OR: PONBOX				
301 Vista	Del Mar				• • •				
301 (1862)									
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El Segund	0				CA		90245	Is the facility located on I lands? No	indian
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		ges to Surface Water).	40.00	430 1, 250	D PSD	(All Ei	nissións from Propos	ed Sources)	
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554						e de la constante			
CATULE.	Undergrour	id Injection of Fluids)		0.100.0	E OTHER		(specify)		
0 U				9		- 1	(specify)		
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A MAI									
Policina and Company of the Company	ication a top	ographic map of the a	rea exte	nding to at least or	ne mile bevond r	property	y boundaries. The m	ap must show the outline	of the
facility, the location	n of each of	its existing and propos	sed intak	ke and discharge s	tructures, each	of its ha	azardous waste treat	ment, storage, or disposal	l facilities,
requirements.	re it injects i	ruids underground. In	iciude aii	i springs, rivers, ar	o other surface	water	oodies in the map an	ea. See instructions for pr	ecise
XIL NATURE OF	BUSINESS	(provide a brief des	cription)	and the second					
To generate e	lectricity				•				
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					·				
XIII. CERTIFICAT	ION . (see:								
l certify under pen	alty of law th	nat i have personally e	xamined	d and am familiar w	rith the informati	ion sub	mitted in this applica	tion and all attachments a	nd that,
								believe that the information bility of fine and imprison	
A. NAME & OFFIC		·	J	B. SIGNATURE		1		C. DATE SIGNED	
		onal Plant Manager	. (	Burn	1//	her		10/5/05	
COMMENTS FOR	* *			1 miles	1. 10	7			
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### Section 3.0 EPA Form 2C and Schematic Diagram of Water Flow

### CARO00037705

FORM 2C



U.S. ENVIRONMENTAL PROTECTION AGENCY

APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER

EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS

Consolidated Permits Program

### I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A: OUTFALL NUMBER (list)		B. LATITUDE 2. MIN	3. SEC		C. LONGITUDI 2. MIN	3, SEC	D. RECEIVING WATER (name)
001	33.00	45.00	53.00	118.00	13.00	17.00	Back Channel in Long Beach Harbor

### II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing of water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g. for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection of treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3). The treatment received by the wastewater. Continue on additional sheets if necessary.

$\frac{1}{1}$	2, OPERATION(S) CONTRIBUT	ING FLOW	3. THEATMENT	
OUTFALL NUMBER (list)	a, OPERATION (list)	b. AVERAGE FLOW * (include units)	a, DESCRIPTION	b, LIST CODES FROM TABLE 2C-1
001	Once Through Cooling Water	261 MGD	Ocean Discharge	4-B
-	Yard Drains	1,2 MGD	Retention & Ocean Discharge	4-B
	Plant Drains	0.07 MGD	Oil Removal, Retention & Ocean Discharge	1-H
	Groundwater Well Point System	1.44 MGD	Oil Removal, Retention & Ocean Discharge	1-H
	Oil Recovery System	0.156 MGD	Oil Removal, Retention & Ocean Discharge	1-H
	Waste from Pacific Energy Group LLC includes the following:		Treatments for Waste from Pacific Energy LLC include the following:	
	Fuel Storage Groundwater Well Point (Tank Farm Drains)	0.504 MGD	Oil Removal, Retention & Ocean Discharge	1-H
	Fuel Storage Yard Drains	Negligible	Oil Removal, Retention & Ocean Discharge	1-H

OFFICIAL USE ONLY (effluent guidelines sub-categories):

<sup>\*</sup>Average flow based on maximum flow rates.

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

### EPA I.D. NUMBER (copy from Item 1 of Form 1):

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

generated by P.A.S.S.	CARO00	0037705		
II. FLOWS, SOURCES OF POLIL	JTION, AND TREATM	NT TECHNOLOGIE	S (cont.)	
C. Except for storm runoff, leaks, or spills, a	The second secon	ribed in Items II -A or -B in (go to Section III)	ermittent or seasonal?	
III. PRODUCTION				
A. Does an effluent guideline limitation pron  X YES (complete item III-B)		n 304 of the Clean Water A to Section IV)	et apply to your facility?	
B. Are the limitations in the applicable efflue  YES (complete Item III-C)		ms of production (or other to to Section IV)	measure of production)?	
C. If you answered "yes" to Item III-B, list the and units used in the applicable effluent gui	e quantity which represents a ideline, and indicate the affec	n actual measurement of yo led outfalls,	our level of production, ex	pressed in the terms
IV. IMPROVEMENTS				
A. Are you now required by any Federal, Standard operation of wastewater treatment equipme this application? This includes, but is not il letters, stipulations, court orders, and grant	nt or practices or any other e imited to, permit conditions, a cor loan conditions.	nvironmental programs whi	ch may affect the discharent orders, enforcement co	ges described in
IV. IMPROVEMENTS (cont.)				
B. OPTIONAL: You may attach additional s which may affect your discharges (including program is now underway or planned, and i	g pollution prevention progra	ns) you now have underwa	y or which you plan. Indie	mental projects cate whether each
	MARK "X" IF DESC	RIPTION OF ADDITIONAL O	CONTROL PROGRAMS IS	ATTACHED
1. PROJECT DESCRIP	TION	2. PROJECT SCHEDI	JLE 3. PROJI	ECT UNDERWAY?

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

### EPA I.D. NUMBER (copy from Item 1 of Form 1):

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

### CARO00037705

V. INTAKE AND EFFLUENT CHARACTERISTICS	
A, B, & C: See instrictions before proceeding - Complete one set of table NOTE: Tables V-A, V-B, and V-C are included on separate she	
D. Use the space below to list any of the pollutants listed in Table 2C-discharged or may be discharged from any outfall. For every pollutant y report any analytical data in your possession.	
1. POLLUTANT	2. SOURCE
asbestos	Pipe insulation (LBGS employs procedures to prevent the release of asbestos to the environment).
VI. POTENTIAL DISCHARGES NOT COVERED BY AN	JALYSIS
Is any pollutant listed in Item V-C a substance or a component of a subs	tance which you currently use or manufacture as an immediate or

the Block of the Foreign of The County with

CARO00037705

ak tangan, ing go programpaga pare ar a natural in yen nina thaksa allam far and bela go m . W serve are anticological property have the second - 311 CONT BUILDER 人名德特尔格特特特 Quarterly Chronic Toxicity Tests (EPA-R-95/136) Tests were conducted in years 2001 through 2004 on receiving and effluent discharge water using abalone, silver slides and kelp. TUc values were 1. Mill Compared and the state of ka sa hang padan distriktipa dan metal di distrik kepadhan di siyi, mangsist di Smidanny di mansahidi yerur sh 7301 Fenwich Lane, 2nd Floor Residual Chlorine, pH, (714) 895-0525 SCE Power Production Chemical Westminster Oil and Grease, TSS, 92683 CA Nitrite-Nitrate, Sulfate, Sulfite, Sulfide, and Total Magnesium 7440 Lincoln Way Phenolics, Cyanide, (714) 895-5494 Calscience Environmental Laboratories, Garden Grove Phosphorus, Inc. 92841 CA Pesticides/PCBs, TKN, COD, TOC, Ammonia, Fluoride, Bromide, and MBAS 225 Commerce Drive Radioactivity (800) 443-1511 Paragon Analytics Fort Collins CO 80524 1721 South Grand Avenue (714) 258-8610 VOCs. SVOCs, and STL Los Angeles Santa Ana Dioxin 92705 CA 2020 Del Amo Boulevard, Suite 200 (310) 533-5190 Trace Metals, Barium CRG Marine Laboratories, Inc. Torrance and Boron 90501 CA age (neg en consiler de la lancació) en la situatada en la consultada en la instrucción de la consiler de la c Agente de la consultada en la consultada e En la consultada en la co La consultada en la consultada B. PHONE NO. (area code & no.) A. NAME & OFFICIAL TITLE Gregory J. Hughes (310) 615-6029 Regional Plant Manager C, SIGNATURE

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

EPA I.D. NUMBER (copy from Item 1 of Form 1):

CARO00037705

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

# TABLE 1 INTAKE AND EFFLUENT CHARACTERISTICS LONG BEACH GENERATING STATION NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05) EPA NPDES Application Form 2C - Section V, Part A Sampling Dates: June 24-25, 2005

EPA ID No. CAR 000 037 705

V. Intake and Effluent Characteristics	tics										Outfall No 001	001
Part A.											Carre	5
				Effluent							intake	
Pollutant	Maximum	Maximum Daily Value	Maximum 3	num 30 Day Value	Long Term	Long Term Avrg Value	No. of	5	Units	Long Term	Long Term Avra Value	No. of
	Conc	Mass	Conc	Mass	Conc	Mass	Analyses	Conc	Mass	Conc	Mass	Analyses
a. Biochemical Oxygen Demand	<1.0	<0.32					-	ma/L	tons	1.5	0.48	1
b. Chemical Oxygen Demand	620	196.37					-	mg/L	tons	450	142.53	-
c. Total Organic Carbon	<5.0	<1.58					_	ma/L	tons	\$20 \$20	-1.58 -1.58	
d. Total Suspended Solids	18.5	5.86					-	ma/L	tons	17.8	5.64	-
e. Ammonia (as N)	<0.10	<0.03					-	ma/L	tons	×0.10	<0.03	-
f. Flow	Valu	Value=76					2	!	MGD			2
g. Temperature (winter)	Intake Va	Intake Value = 16.9	Value	/alue = 20.3	Value = 19.7	- 19.7	06	Ded	Deg - C	Value = 16,1	= 16.1	06
<ul><li>h. Temperature (summer)</li></ul>	Discharge \	Discharge Value = 20.3	Value	/alue = 26.1	Value = 26	= 26	95	Ded	Ded - C	Value = 22.1	= 22.1	92
i. pH	Min=7.50	Max=7.63	Min = NA	Max = NA	A/N	A	6	Standar	Standard Units	Min=7.56	Max=7.82	6

### Vote:

- calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used 1) "<" indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of for the purpose of determining compliance with effluent limits.
- 2) Mass emissions were calculated using the flow during the actual sampling period (i.e. 76 MGD).
- 3) Flow information is based upon daily discharge flows from June 24-25, 2005.
- 4) Temperature information is based upon daily average temperatures from:
  - \* Summer July 1 to September 30, 2004
    - \* Winter January 1 to March 31, 2004

### LONG BEACH GENERATING STATION NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05) EPA NPDES Application Form 2C - Section V, Part B INTAKE AND EFFLUENT CHARACTERISTICS TABLE 1

EPA ID No. CAT 000 037 705

					EPA	EPA ID No. CAT 000 037 705	30 037 705								
V. Intake and Effluent Characteristics														Outfall No. 001	9.001
Part B.															
		Mark					Effluent							Intake	
Pollutant	CAS No.	Believed	Believed	Maximum Daily Value	aily Value	Maximum 3	Maximum 30 Day Value	Long Term	Long Term Avrg Value	No. of	Units	22	Long Term Avra Value	Avra Value	No. of
		Present	Absent	Conc	Mass	Conc	Mass	Conc	Mass	Analyses	Conc	Mass	Conc	Mass	Analyses
a. Bromide	24959-67-9	×		81	25.65					-	J/6m	tons	88	26.92	-
<ul><li>b. Chlorine, Total Residual</li></ul>		×		<0.03	<19.0					o,	mg/L	sqi	<0.03	<19.0	6
c, Color		×		<40	Ā					1	color units	N/A	<b>\$</b>	ΝA	-
d. Fecal Coliform		×		<20	NA					6	MPN/100ml	N/A	110	NA	6
e. Fluoride	16984-48-8	×		0.71	449.75					-	mg/L	sqi	0.70	443.41	-
f. Nitrate-Nitrite (as N)		×		<1.0	<633.44					-	mg/L	ps	0.1>	<633.44	,
g. Nitrogen, Total Organic (as N)		×		<0.50	<316.72					-	mg/L	sqi	<0.50	<316.72	
h. Oil and Grease		×		4.14	<886.82					6	mg/L	sq	1	1	0
i. Phosphorus, (as P) Total	7723-14-0	×		0.15	95.02					-	mg/L	sq	<0.10	<63,34	,
j(1). Radioactivity: Alpha, Total		×		-2 ++ 27						_	PCIA		-13 +/- 27		
j(2). Radioactivity: Beta, Total		×		277 +/- 75						-	J/Od		275 +/- 75		,-
i(3). Radioactivity: Radium, Total		×		0.09 +/- 0.13						-	PCi/L		0.08 +/- 0.11		,_
j(4). Radioactivity: Radium 226, Total		×		0.19 +/- 0.26						-	PCi/L		0.09 +/- 0.30		-
k. Sulfate (SO4)	14808-79-8	×		2330	737.96					-	mg/L	tons	2370	750.63	_
l. Sulfide (as S)		×		<0.02	<12.69					-	mg/L	sq	<0.02	<16.69	,
m. Sulfite (as SO3)	14265-45-3	×		۷-1.0 دا.0	<633.44					-	mg/L	ps	0.15	<633.44	,
n. Surfactants		×		<0.10	<63.34					1	mg/L	sq	<0.10	<63.34	-
o, Aluminum, Total	7429-90-5	×		11.1	7.03					-	J/6n	sq)	40.2	25,46	_
p. Barium, Total	7440-39-3	×		2 100	<63.34					1	ng/L	Są.	95	<63.34	-
q. Boron, Total	7440-42-8	×		5.98	1.89					1	mg/L	tons	5.47	1.73	-
r. Cobalt, Total	7440-48-4	×		<0.005	<0.003					1	ng/L	sq	<0.005	<0.003	-
s. Iron, Total	7439-89-6	×		32.6	20.65					1	ng/L	sq	25.8	16.34	-
t. Magnesium, Total	7439-95-4	×		1200	380.07					1	_ πg/L	tons	1220	386.4	_
u. Molybdenum, Total	7439-98-7	×		9.1	5.76					1	J/Gn	sqj	9.4	5.95	-
v. Manganese, Total	7439-96-5	×		19	12.04					-	T/6n	sq)	-17	10.77	-
w. Tin, Total	7440-31-5	×		0.019	0.01					-	ng/L	şqį	0.017	0.012	_
x. Tranium, Total	7440-32-6	×			0.70					-	l J/bn	şq	2,2	1,39	-

Note:

1) \*\*\* indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used for the purpose of determining compliance with effluent limits.

2) Mass emissions were calculated using the flow during the actual sampling period (i.e. grab samples - 76 MGD; composite samples - 76 MGD)

## TABLE 1 INTAKE AND EFFLUENT CHARACTERISTICS LONG BEACH GENERATING STATION NPDES PERMIT (CA0001171) RENEWAL APPLICATION EPA NPDES Application Form 2C - Section V, Part C

V. Intake and Effluent Characteristics						EPA ID No. C	EPA ID No. CAR 000 037 705	705							Outfall No. 001	5. 001
Part C.			Mark X					Effluent				S.			Intake	
Pollutant	CAS No.	Testing Required	Believed Present	Believed	Maximum Daily Value Conc Mass	Daily Value Mass	Maximum 3(	Maximum 30 Day Value Conc Mass	Long Term Avrg Value Conc Mass	Avrg Value Mass	No. of Analyses	Units	Mass	Long Term Avrg Value Conc Mass	Avrg Value Mass	No. of Analyses
Metals, Cyanide, and Total Phenols																
Total Antimony	7440-36-0	×			0.161	0.10					-	l/bn	<u>sq</u>	0.125	0.08	-
Total Arsenic	7440-38-2	×			1.62	1.03					- -	l/6n	2 2	18.0	0.83	- -
Total Beryllium	7440-43-0	<b>\</b>			0000	200					-	1/21	8 2	5000	1000	-
Total Chromium	7440-47-3	×			0.35	0.22					-	1/01	<u>s</u>	0.43	0,27	-
Total Copper	7440-50-8	×			2.70	1.71					-	l/gu	ps	1.85	1.17	1
Total Lead	7439-92-1	×			0.39	0.25					1	ng/l	gq	0.39	0.25	1
Total Mercury	7439-97-6	×			0.0016	0.001					-	/6n	sq	0.0015	0.001	
Total Nickel	7440-02-0	×			0.99	0.63						/bn	şq	0.38	0.24	
Total Selenium	7782-49-2	×			<0.01	40.01					-	l/gu	<u>s</u> .	0.20	0.20	
Total Silver	7440-22-4	×			<0.005	<0.003					-	/ôn	sc	<0.005	<0.003	- ,
Total Thallium	7440-28-0	×××			50.00	\$0.003						/bn	SO 4	0.008	0.0	-
Total Cincida	7440-bb-b	<\>			70.07	13.34					- 0	7/000	P 2	2	27.0	- 0
Total Deposits	27.70	<b>*</b>			0.54	342.06					6	7,000	S S	-	;	
Dioxin						2011										
2.3.7.8-Tetrachlorodibenso-P-Dioxin	1746-01-6			×	7.5							//bd	sql	1		
GS/MS Fraction - Volatile Compounds																
1V acrolein	107-02-8	×			<12	<7.60					5	l/Sn	sql		-	0
2V acrylonitrile	107-13-1	×			<10	<6.33					5	ng/l	lbs		1	0
3V benzene	71-43-2	×			<0.3	<0.19					5	l/gn	lbs	-	-	0
4V bis (Chloromethyl) Ether	542-88-1	N/A*			<1.0	<0.633					9	l/gn	lbs			0
5V bromoform	75-25-2	×			<0.3	<0.19					5	l/gu	(ps	-		0
6V carbon tetrachloride	56-23-5	×			<0.3	<0.19				Ĩ	2	/6n	sq	,		0
7V chlarobenzene	108-90-7	×			×0.3	<0.19					5	J/Bn	sq		:	٥
8V chlorodibromomethane	124-48-1	×			40.4	<0.25					5	/bn	sal		1	٥
9V chloroethane	75-00-3	×			×0.3	81.0v					٦	iði i	SC	3	:	
10V 2-chioroethylvinyl ether	110-75-8	×,			0.50	<1.27 0.40					n u	ng/	S 4	;	:	-
11V Chiororm	200-3	<b>\</b>			50.0	50.19					0 4	in in	eng g		1	
12V dichioropiomomenane	10-27	٧١/٧٠			50.0	20.05					) t	, v	S &			,
13V dictilorounduloionement	75.34.9	<b>V</b> 2				70.197					, tr	/ba			1	c
14V J. I-dichloroethane	107-04-0	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				70.05					, "	701	2 <u>4</u>			
15V 1,Z-ucitiofoetilane	75-35-4	<b>(</b> >			į «	01.0					5	1/011	ş	ı		
12V 1 2-dichloropropage	78-87-5	×			<0.3	60.19					5	/on	sq	:	:	0
18V 1 3-dichloropropylene	542-75-6	×			<0.5	<0.32					· C	no/	sq	1	;	0
19V ethylhenzene	100-41-4	×			<0.2	<0.127					2	l/on	sql	:	;	0
20V methyl bromide	74-83-9	×			41.0	<0.63					2	ľgu	ibs		:	0
21V methyl chloride	74-87-3	×			<0.3	<0.19					5	l/gu	sq)	-	-	٥
22V methylene chloride	75-09-2	×			<0.3	<0.19					S)	l/gu	g	ť	1	٥
23V 1,1,2,2-tetrachloroethane	79-34-5	×			<0.4	<0.25					5	/gn	sq	1	1	0
24V tetrachloroethylene	127-18-4	×			<0.3	<0.19					2	/6n	sq.	:	1	0 (
25V toluene	108-88-3	×			<0.3	60.19					5	ngv.	SQ.	:	1	0 (
26V 1,2-trans-dichloroethylene	156-60-5	×			¢0.3	60.09			$\int$		ç	/6n	Sal	;	;	9
27V 1,1,1-trichloroethane	7000	× >			\$ 6	40.12/					6 4	000	2 2	-	; ;	-
28V 1,1,2-tricnloroethane	79-00-9				00.00	20.13					7 4	700	20 ag		;   ,	
20V dictionolinyiene	75.69.4	N/A*			200	9 6					) v.	7/01	ş		1	c
31V viol obloride	75-01-4	×			503	60.19					2	l/on	sq		;	٥
32V tribututtin (Note 3)	>	×			2	;					0	l/on	sql	:	1	0
Company and Ago																
GS/MS Fraction - Acid Compounds																
1A 2-chlorophenol	95-57-8	×			<3.0	<1.90					-	l/gu	sql	-	:	0
2A 2,4-dichlorophenol	120-83-2	×			<5.0	<3.17					-	l/gu	sq.	'	1	0
3A 2,4-dimethylphenol	105-67-9				<5.0	<3.17						l/gn	sq.	1	1	0

## TABLE 1 INTAKE AND EFFLUENT CHARACTERISTICS LONG BEACH GENERATING STATION NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05) EPA NPDES Application Form 2C - Section V, Part C

V. Intake and Effluent Characteristics						EPA ID No. (	EPA ID No. CAR 000 037 705	705							Outfall No. 001	0.001
Part C.			Mark					1.000								
Pollutant	CAS No.	Testing	Believed	Believed	Maximum Daily Value	Jaily Value	Maximum 30	30 Day Value	Long Term /	Avrg Value	No. of	Units	<u>.</u>	Long Term	Intake	No. of
		Required	Present	Absent	Conc	Mass	Conc	Н	Conc Mass	Mass	Analyses		1-	Conc Mass	Mass	Analyses
AA 4,0-CITIIII 0-0-Cresol	1-24-52-1	*,			0.0	<6.33					,-	l/bn	sql	-		0
SA 2-aritrophenol	31-20-5	<b>*</b>			×15	<9.50						/Gn	sql	-		0
7A 4-nitronhenol	100,02-7	\ <u>\</u>			0.4.0	55.53						ľgu	sql	1		0
8A p-chloro-m-cresol	59-50-7	×			000	40.05					-	/on	sq.	;	-	0
9A pentachlorophenol	87-86-5	×			×10	<6.33					-	l/on	SO L	<u> </u>		٥
10A phenol	108-95-2	×			<2.0	<1.27						0	S A			0
11A 2,4,6-trichlorophenol	88-06-2	×			<2.0	<1.27					-	l/on	s Q	: :	;	0
0																,
45 constitution - Base/Neutral Compounds	L	,			,											
28 acenantitudena	90-30-9	< >			<3.0	06.1					-	l/bn	sql		-	o
3B anthracene	120-12-7	\ \ 			0.25	12.12			1		-	l/on	sql	:	-	٥
4B benzidine	92-87-5	×			2 4.0	1.27			1		-   ,	l/gu	SQ	:	:	0
5B benzo(a)anthracene	56-55-3	×			<2.0	<1.27					- -	ngo.	SO	1	ı	0
6B benzo(a)pyrene	50-32-8	×			42.0	<1.27					<del> </del>	WD5	SOI		1	0
7B 3,4-benzofluoranthene	205-99-2	×			<5.0	<3.17					-	(A)	2 2		•	
8B benzo(ghi)peryfene	191-24-2	×			<2.0	<1.27					-	1/011	2 4		: :	
98 benzo(k)fluoranthene	207-08-9	×			<5.0	<3.17					-	l/oil	Pa	:		
10B bis(2-chloroethoxy)methane	111-91-1	×			<2.0	<1.27					-	ľon	S G		,	
11B bis(2-chloroethyl)ether	111-44-4	×			<3.0	<1.90					-	[/on	ps	-	,	,
12B bis(2-chloroisopropyl)ether	102-60-1	×			<4.0	<2.53					-	Jon	São			,
13B bis(2-ethylhexyl)phthalate	117-81-7	×			<4.0	<2.53					-	/Gn	sq		,	
145 4-promophenyl phenyl ether	101-55-3	×			<2.0	<1.27					-	l/Gn	sq	1	,	-
155 puryloenzyl primarate	7-99-08	×			¢4.0	<2.53					1	l/gu	sqi		1	0
178 4-chlorophon/ phon/ other	31-30-/	<b>\</b>			330	05.1.50						l/gn	sqj	1	-	0
18B chosene	218,01.0	}			2 0	/7. 2					-	l/6n	sqi	:	1	0
198 dibenzora. hlanthracene	53-70-3	`×			0.4	12.12					-	/ôn	<u>sa</u>	1	-	٥
20B 1,2-dichlorabenzene	95-50-1	×			200	2 5			1		-	ng/l	Sa .		1	٥
21B 1,3-dichlorobenzene	541-73-1	×			250	<127						Jon S	Sal	,	-	٥
22B 1,4-dichlarobenzene	106-46-7	×			<3.0	061>					- -	on in	20 4	1		٥
23B 3,3-dichlorobenzidine	91-94-1	×			<5.0	<3.17					-	1/01	S 4	:	ł	0
24B diethyl phthalate	84-66-2	×			<2.0	<1.27					-	7/00	SQ SQ		: :	
25B dimethyl phthalate	131-11-3	×			<2.0	<1.27					-	/on	şç			
26B di-n-butyl phthalate	84-74-2	×			<2.0	<1.27					_	/on	sa	1	1	,
Z/B Z,4-dinitrotoluene	121-14-2	×			<2.0	<1.27					-	/bn	sql		1	0
28B 2,b-unimolouene	2-02-00-	×þ			42.0	<1.27					-	1/6/1	sql		1	0
230 directly printalere (308 1 2-dinhenylhydrazina (as azobeozepa)	122.68.7	<b>\</b>			0.40	42.53					-	l/dn	sql	ı	-	0
318 fluoranthene	206-44-0	(×			200	72.57					-	/gn	sqi	1	;	0
32B fluorene	86-73-7	×				1 27					- -	Jon 1	sq		-	
33B hexachlorobenzene	118-74-1	×			\$5.0	<3.17				1	-	Marin Control	SO	;	1	ا-
34B hexachtorobutadiene	87-68-3	×			<2.0	<1.27					-	) I	Sign		•	
35B hexachlorocyclopentadiene	77-47-4	×			<6.0	<3.80					-	//011	Super	:   1	:	
36B hexachloroethane	67-72-1	×			<3.0	<1.90					-	100/	sq	:	! !	-
37B indeno(1,2,3-cd)pyrene	193-39-5	×			<2.0	<1.27					-	l/6n	sq		'	
Sob scotteriore	78-59-1	×;			3.0	4.90					1	l/Gn	sql	:	1	0
AOB nitrokonzono	91-20-3	<b>×</b> >			<3.0	41.90		-				ug/l	sql	1	-	0
418 N-nitrosod/methylamine	62-75-0	< <i>&gt;</i>			0.00	<3.17						n⊘/l	sql	1	ı	0
428 N-nitrosodi-n-propylamine	621-64-7	(×			0,7	44.43						l⁄gu	lps	1	:	0
43B N-nitrosodiphenylamine	86-30-6	   			200	2,52					-	l/gu	sq	:	:	0
44B phenanthrene	85-01-8	×			25.0	<1.27					<del> </del>	(a)	SOL			
45B pyrene	129-00-0	×			<3.0	41.90			1		-	7/01	8 2	: :	1	
46B 1,2,4-trichlorobenzene	120-82-1	×			<5.0	<3.17					-	/on	sq	<b>†</b>		,
			1									 				Ţ
														1		

### NPDES PERMIT (CA0001171) RENEWAL APPLICATION (10/12/05) EPA NPDES Application Form 2C - Section V, Part C INTAKE AND EFFLUENT CHARACTERISTICS LONG BEACH GENERATING STATION

EPA ID No. CAR 000 037 705

						EPA ID No. C	EPA ID No. CAR 000 037 705	8				-				
V. Intake and Effluent Characteristics															Outfall No. 001	00.001
Part C.																
			Mark X					Effluent							Intake	
Pollutant	CAS No.	Testing	Believed	Believed	Maximum Daily Value	Daily Value	Maximum 30 Day Value	Day Value	Long Term Avrg Value	vrg Value	No. of	Units	<del>اسا</del> دە	Long Term Avrg Value	vrq Value	No. of
		Required	Present	Absent	Conc	Mass	Conc	Mass	Conc	_	Analyses	Conc	Mass	Conc	_	Analyses
GS/MS Fraction - Pesticide Compounds															T	
1P aldrin	309-00-2			×	<0.10	>0.06					-	l/6n	q	-		0
2P alpha-BHC	319-84-6			×	<0.10	<0.06					-	l/6n	sq	:		0
3P beta-BHC	319-85-7			×	<0.10	<0.06					-	l/on	sq	;		0
4P gamma-BHC	58-89-9			×	<0.10	<0.06					-	l/bin	sq	:	ı	0
5P delta-BHC	319-86-8			×	<0.10	>0.06					-	l/gu	sq		:	0
6P chfordane	57-74-9			×	<1.0	<0.63					-	γδη	sqi	1	:	0
7P 4,4-DDT	50-29-3			×	<0.10	<0.06					-	γδη	sqi	1	1	0
8P 4,4-DDE	72-55-9			×	<0.10	<0.06					-	/bn	sqi		1	0
9P 4,4-DDD	72-54-8		-	×	<0.10	90:0>					-	/bn	sql		,	0
10P dieldrin	60-57-1			×	<0.10	>0.06					-	/bn	sq			0
11P alpha-endosulfan	115-29-7			×	<0.10	<0.06					-	/bn	sql		-	0
12P beta-endosulfan	115-29-7			×	<0.10	<0.06					-	l/6n	sq			0
13P endosulfan sulfate	1031-07-8			×	<0.10	<0.06					·-	l/6n	sq	1		0
14P endrin	72-20-8			×	<0.10	<0.06					,,,	l/6n	sq	;	,	0
15P endrin aldehyde	7421-93-4			×	<0.10	<0.06					-	l/6n	<u>sa</u>	:	,	0
16P heptachfor	76-44-8			×	<0.10	<0.06					-	l/Sn	<u>sa</u>	:	,	٥
17P heptachior epoxide	1024-57-3			×	<0.10	<0.06					-	l/Sn	sq	  -	:	0
18P PCB-1242	53469-21-9			×	<1.0	<0.63					-	l/6n	sql	-	;	o
19P PCB-1254	11097-69-1			×	<1.0	<0.63					1	l/Sn	sql	-	:	٥
20P PCB-1221	11104-28-2			×	<1.0	<0.63					-	l/6n	sq	,		0
21P PCB-1232	11141-16-5			×	<1.0	<0.63				_	-	l/6n	ğ	,		0
22P PCB-1248	12672-29-6			×	<1.0	<0.63			ì		-	l/Gn	sqi	:		0
23P PCB-1260	11096-82-5	-		×	<1.0	<0.63					-	l/gu	sq			0
24P PCB-1016	12674-11-2			×	<1.0	<0.63					-	l/Gn	sq		:	0
25P toxaphene	8001-35-2			×	<2.0	<1.27					1	l/gu	sqi	:	:	0

N/A\* - This pollutant has been deleted from Table II in 40 CFR 122.21, therefore testing is not required.

1) \*c\* indicates that the pollutant concentration was not detected. For these pollutants, the detection limit is reported in the concentration column. For the purpose of calculating mass emissions for this table, the detection limit was utilized as the concentration where the pollutant was not detected. Such substitution should not be used for the purpose of determining compliance with effluent limits.

Mass emissions were calculated using the flow during the actual sampling period:
 grab and composite samples - 75.6 MGD

3) This chemical is being tested for per Table B of the 2001 California Ocean Plan.

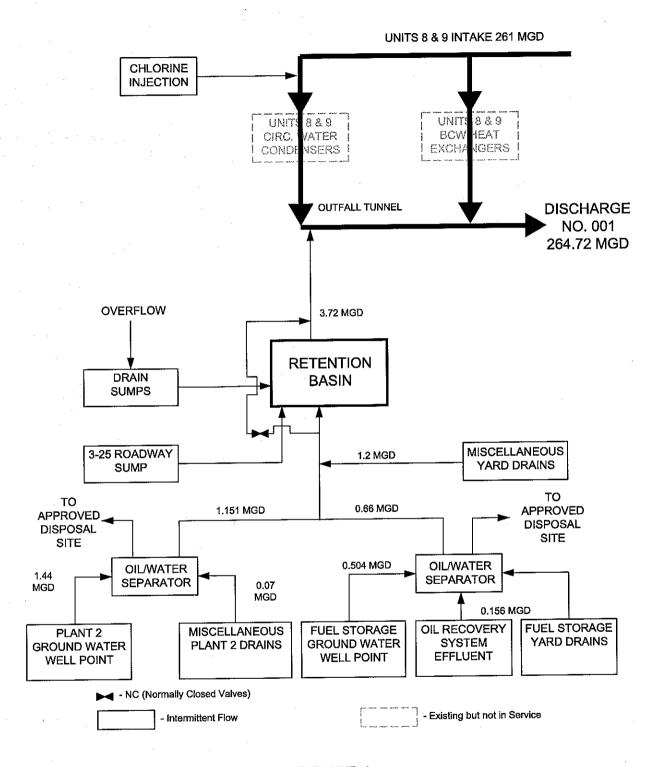


FIGURE-4 SCHEMATIC DIAGRAM OF WATER FLOW EXISTING OPERATION