

**DOCKET** 

09-AFC-1

DATE MAR 02 2010

**RECD. MAR 09 2010** 

March 2, 2010

Dockets Unit California Energy Commission 1516 Ninth Street, MS 4 Sacramento, CA 95814-5512

Re: Watson Cogeneration Steam and Electric Reliability Project

Application for Certification 09-AFC-1

On behalf of Watson Cogeneration Company, the applicant for the above-referenced Watson Cogeneration Steam and Electric Reliability Project, we are pleased to submit the following air permit application modifications that were recently submitted to South Coast Air Quality Management District (SCAQMD):

- Application for Change of Condition to Watson Cogeneration Units 1-4 (Watson Cogeneration Steam and Electric Reliability Project); and
- Addendum Application for Using Aqueous Ammonia in Watson Cogeneration Steam and Electric Reliability Project, A/Ns 496922, 496924, and 496925.

These permit application modifications were prepared and submitted at the request of SCAQMD.

These documents are being submitted to the CEC for docketing.

Sincerely,

**URS** Corporation

Cindy Kyle-Fischer Project Manager

Enclosures

cc: Proof of Service List

( bele-heele



February 24, 2010

BP West Coast Products LLC
BP Carson Refinery
2350 E. 223rd Street
Mailing Address: Box 6210
Carson, California 90749-6210
United States of America

Telephone: +1 (310) 816-8100

South Coast Air Quality Management District Attn: Permit Processing 21865 Copley Drive Diamond Bar, CA 91765-4182

Subject: Addendum Application for Using Aqueous Ammonia in Watson

Cogeneration Steam and Electric Reliability Project, A/Ns 496922,

496924, and 496925.

Reference: Watson Cogeneration Company, Electric Generation (Process 17),

**BP Carson Refinery, Facility ID 131003** 

Dear Sir/Madam:

Enclosed, please find the addendum permit applications for using aqueous ammonia on the proposed new cogeneration unit in the Watson Cogeneration Steam and Electric Reliability Project. A check in the amount of \$2,051.52, based on Rule 301 application fees, is enclosed for the aqueous ammonia tank. Please note that application fee for the attached Form 400-E-5 (SCR System, Oxidation Catalyst, and Ammonia Catalyst) was submitted previously, and therefore, no additional fee is required.

Please note that permit application forms 500-A2 and 500-C1 were submitted previously as part of pending application numbers 496922, 496924 and 496925 and have not been re-submitted as part of this permit application package. Additionally, please note that, per the directive from Jay Chen (SCAQMD; Senior Manager), Forms 500-C2 are not to be submitted with each individual permit application package. Rather, up to date Forms 500-C2 will be submitted to the SCAQMD, as requested, and immediately prior to each re-issuance of the Title V permit. No Forms 500-C2 are submitted with this current permit application package.

Please call me at (310) 847-5652 if you have any questions or comments regarding the enclosed package.

Sincerely.

John Shao

**Environmental Project Engineer** 

Permit Processing February 24, 2010 Page 2 of 2

### **Enclosures**

cc: BP Env. File 06A01-0046391 (with attachment)

Ross Metersky – BP (with attachment)

Tom Lu – Watson Cogeneration Company (with attachment)

ecc: ECC 2010-02-24 AQMD Addendum Permit for Using Aqueous Ammonia in

Watson Cogeneration Steam and Electric Reliability Project (cover letter only)

Eric Daley – BP (cover letter only) Alan Seese – BP (cover letter only)

Scott Hawley - Watson Cogeneration Company (cover letter only)

**Watson Cogeneration Company** 

046901

INVOICE NO

DISCOUNTMOUNT

NET AMOUNT

02/17/10

DATE

STORAGE-T

2,051.52

.00

2,051.52

CHECK: 046901 02/22/10 So.Coast Air Quality Mgmt Dist CHK TOTAL:

2,051.52

046901 222

WCC-6000-A (1-91)

### THE FACE OF THIS CHECK HAS A COLORED BACKGROUND - NOT A WHITE BACKGROUND

## Watson Cogeneration Company

22850 South Wilmington Avenue Carson, California 90745-6203

Citibank Delaware ASUBSIDIARY OF CITICORP ONE PENN'S WAY NEW CASTLE, DE 19720

O46901

02/22/10

Amount

\*TWO THOUSAND FIFTY ONE DOLLARS AND 52 CENTS

So.Coast Air Quality Mgmt Dist

21865 Copley Drive

Diamond Bar

38553567#

10311002091

South Coast Air Quality Management District

## Form 400-A Application For Permit To Construct and Permit To Operate

Mail Application To: P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385 www.aqmd.gov

Section A: Operat				Commission of the Commission o				**************************************	4	ing or the con-	<b>.</b>	Care and a contract of the con-	TO THE PROPERTY OF THE PARTY OF
1. Business Name of									-		2.5.2		10.000.000.000
BP West Coast I									· - *	2.4 hombigu <del>ette</del>			The second section of the second seco
<ol><li>Valid AQMD Facility issued by AQMD):</li></ol>	y ID (Available on 131003	Permit or invo	oice 3.	. Owner's Business Na	me (only	lf differ	ent from B	Busin	ess Name	of Operat	or):		
issued by AQMD).	ion Co	mpar	ıy			er Tile 1994 Filmhon Conness							
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County:   Los Angele	es 🔘 Orange	(∵ San Bema	ardino ()	Riverside									e e e e e e e e e e e e e e e e e e e
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Contact Title: Environ	nmental Engir	neer	Phone:	(310) 847-5652	Contac	ct Title:	Environ	mei	ntal Eng	ineer	d density war - 1 and - 1	Phone: (31	10) 847-5652
Fax: (310) 847-57	80 E-Ma	<sub>iil:</sub> john.sh	ao@bp.	com	Fax:	(310)	847-57	80		F.M	<sub>ail</sub> joh	n.shao@	bp.com
Section D: Applica	96200360505050505055555555555555555555555	4.12812.41.2.11.	377710730	RECLAIM OTI	1 WA				tle V Pr				f applicable)
6. Reason for Submit	Sent Washington Color Co			THOUSEN SO TH								tion (MM/DD/	
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Construct)	•		Approval*	in a distribution of this p	"		•		quipment:				_
Equipment Operat	Ena Mithaut A	Deanos	ad Allacation	n/Modification to Permitted	Aqueous ammonia tank for SCR system for unit #5 (see supplemental tank form)								
Permit or Expired		C Equipos		manorinestion to Leminted									
Administrative Cha		1		n For Permit To Operate									
	•			•									
C Equipment On-Site Constructed or Op		€. Chang	e of Conditio	on For Permit To Construct	9. Is this equipment portable AND will it be operated at different locations within AQMD's jurisdiction?  • No • Yes								
Title V Application etc.)	(Initial, Revisions,	○ Chang	e of Location		11. Are you a Small Business as per AQMD's Rule 102 definition? (10 employees or less and total gross receipts are \$500,000 or less, or a not-for-profit training center?)  12. Has a Notice of Violation (NOV) or a Notice To Compty (NC) been issued for								
Compliance Plan				rmit/Application Number; ns in this column, you MUST									
G Facility Permit Am	endment	provide a exis	ling Permit/ App	plication Number)									
C Registration/Certif	ication			TOTAL THE STATE OF								C) been issued for	
<ul> <li>Streamlined Stand</li> </ul>	lard Permit					th	is equipm	ent?	•	•			
* A Higher Permit Process		nose items wit	h an asterisk	(Rule 301 (c) (1) (D)				•	No OY	es If yes	, provide	NOV/NC#:	
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Petroleum refinin	g		-		(1	North An	nerican Indu	ustrial	Classificatio	n System)	?		324110
15. Are there other facili by the same operato		D jurisdiction	operated	○ No ② Yes			e any scho ant physica		K-12) withi	n a 1000-	ft. radiu	s of the	No ○ Yes
Section F: Authori	zation/Signatu	i <b>re</b> i hereid ce	ertify that all I	nformation contained herein.	and inform	nation su	omitted with	i this	application is	true and	correct		Control Control
17. Signature of Respon	sible Official:			18. Title:	<u> </u>			A Anna		Marian Company		ck-List	and the state of t
Environmental Ma						•						r authorized o rm (400-E-XX	fficial (or 400-E-GEN)
19. Print Name:								X	CEQA For	m.(400-€	ECA) att	ached	Medicana maka 1
Alan Seese 02/24/10								X	Payment f	or permit	processi	ng fee attache	M-Adam Company
Afait Seese Your application will be rejected it any of the above items are missing:								e items are missing					
	PPLICATION/TRAC	KING#	TYPE	EQUIPMENT CATEGO	RY CODI	E:		1	FEE SCHE	DULE:	VALI	DATION	·
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DATE	DATE		1 10 IA	Unit Enginee	r		r			1		I	

Mail Application To: SCAQMD P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEOA, Plot Plan and Stack Form www.agmd.gov Permit to be issued to (Business name of operator to appear on permit): BP West Coast Products LLC-BP Carson Refinery Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial localion site): 2350 E. 223rd Street, Carson, CA. 90810 C External Floating Roof Tank (EFRT) Internal Floating Roof Tank (IFRT) Horizontal Tank (HT) Tank Type (Select ONE) Vertical Fixed Roof Tank (VFRT) Domed External Roof Tank (DEFRT) Tank Identification Number: Tank Contents/Product (include MSDS): Identification. Aqueous ammonia 30% solution SECTION A: TANK INFORMATION \$ 18 KK Shell Dlameter (ft): Shell Length (ft): Shell Height (ft): TumoversPer Year: 7.00 44,88 tank of the second 10 10 10 Is Tank Heated? is Tank Underground? Net Throughput Self Support Roof eserve. (gal/year): O Yes 🏵 No Tyes ( No. ○ Yes ○ No Number of Columns? Effective Column Diameter: ○ 9° by 7° Built Up Column – 1.1 ○ 8° Diameter Pipe – 0.7 ○ Unknown → External Shell Condition: Internal Shell Color: External Shell Color: C Good C Light Rust ⟨ White/White ○ Gray/Light Tank AND WELL Characteristics ○ Poor O Dense Rust Aluminum/Specular C Gray/Medium Gunite Lining ○ Aluminum/Diffuse ○ Red/Primer Average LiquidHelght (ft): Maximum LiquidHeight (ft): Working Volume (gat): (VERT Only) (VERT Only) (VERT Only) Paint Condition: Paint Color/Shade: ○ Good ○ Wnite/Wnite Gray/Light Gray/Medium C Poor Aluminum/Diffuse C Aluminum/Specular ○ Red/Primer Physical -Roof Type: Roof Fitting Category: Roof Height: Characteristics Pontoon C: Dome Roof (Height\_.... \_\_ (t.) C Typical Roof C Double Deck O Cone Roof (Height\_\_\_\_\_\_ft.) O Detail Characteristics **Roof Paint Condition** Roof Color/Shade . Process (Fleating Roof Tank) Occid ○ White/White Gray/Light 173 ○ Poor Aluminum/Diffuse C Aluminum/Specular Red/Primer Deck Type; **Deck Fitting Characteristics:** Helding of C Welded C Bolted ○ Typical ○ Datailed (Complete Deck Seam) Deck Deck Seam Construction: Deck Seam: Characteristics Length (ft): 130,00 (Floating Roof Tank) ି Sheet ○5 ft. wide ○ 6 ft. wide ○ 7 ft. wide distribution in C Panel ○5x7.5ft. ○5x12ft. Tank Construction; Tank Construction Primary Seal: Secondary Seal: and Rim-Seal ○ Welded Mechanical Shoe C Liquid Mounted Rim Mounted C None System (Floating Roof Tank) ै Riveted C Vapor Mounted Shoe Mounted Vacuum Setting (psig): Pressure Setting (psig): Breather Vent Setting 30.000 30,000

"Section C of the application MUST be completed.

			- Arthur Walley Color St. Co.			1384 646
	Nearest Major City: Carson	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	200000000000000000000000000000000000000	27.201122 m		
	Dally Average Ambient Temperature (°F):		Annual Average	Minimum Temps	erature (°F):	The second of th
Site Selection	Annual Average Maximum Temperature (°)	F):	Average Wind Sp	oced (mph):		
	Annual Average Solar Insulation Factor (B	tu/(ft³ * ft * day)):	The second secon			
Tank Contents	Chemical Category  C Organic Liquids C Cude Oil	Liquid Single	If Multiple, Select		eclation 🔆 Partia	I Speciation
	C Petroleum Distillates	○ Multiple:	Speciation Option	: O Various	s Welght Speciation	п С Моле
SECTION B: OPERATION	N INFORMATION					
Vapor Control	Vapor Control During Loading or Unloading  Sparger Vapor Balance System  Vented to Air Pollution Control Equipment	▼ Vapor Return	Line		te permit is required eady permitted, provi	
	Indicate Type of Setting and Vapor Disposa		···			
Vent Valve Data	Number Combination Pressure Vaccum Open	Pressure Setting Vac	ocum Setting A		(Check Appropriat	e Box) Flare
	Name all liquids, vapors, gases, or mixtures Aquoeus ammonia, 30% solution, if Material is stored in a solution, supply the Name of Solvent: water	, 12000 gal tani	k Lion:	on and and a		
Materials	Concentration of Materials Dissolved:	30.00 % by Weighl		rials Dissolved:	M. Addition I	
SECTION C: ROOF/DECK	and the second of the second o		on the second			
Section C is required for the following t Internal Floating Roof Tank, or Domed		mber of fittings for eac	h applicable question	n. For Example:	3 Unbolled Cover, Unbolled Cover.	
	Access Hatch (24* diameter well)     Bolled Cover, Gasketed	Automatic Gauge I (20° diameter well) Bolted Cover, G			(24" diameter well) of – Stiding Cover, G	Sasketed
Roof/Deck-Fitting Details	Unbolted Cover, Ungasketed Unbolted Cover, Gasketed	Unbolted Cover		, market	ol – Sliding Cover, U Flex. Fabric Steeve	
					Sliding Cover, Gask	

Control Section Control of the Control of the Section							
	4. Gauge Hatch/Sample Well (8° diameter well)		5. Ladder Well (36" diameter)	6. Rim Vent (6" diameter)			
	Weighted Mechanical Actuation, Gasketed		Sliding Cover, Gasketed	Weighted Mechanical Actuation, Gasketed			
	Weighted Mechanical A	ctuation, Ungasketed	Sliding Cover, Ungasketed	Weighted Mechanical Actuation, Ungasketed			
	7. Roof Drain (3° dameler)	8. Roof Leg (3" diar	neter leg)	9. Roof Leg or Hang Well			
The Common Commo	Open	Adjustable, F	Pontoon Area, Ungasketed	Adjustable			
e vin	90% Close	Adjustable, C	Center Area, Ungasketed	Fixed			
	: -	Adjustable, D	Oouble-Deck Roofs	10. Sample Pipe (24" diameter)			
		Fixed		Slotted Pipe - Sliding Cover, Gasketed			
		Adjustable, P	ontoon Area, Gasketed	Slotted Pipe – Sliding Cover, Ungasketed			
		Adjustable, P	ontoon Area, Sock	Slit Fabric Seal, 10% Open			
	-	Adjustable, C	enter Area, Gasketed	•			
Roof/Deck Fifting Détails (Cont.)		Adjustable, C	enter Area, Sock				
	11. Guided Pole/Sample Well	***************************************	12Stub Drain	(1" diameter)			
	Ungasketed, Sliding Co	over, Without Float	13. Unslotted Guide -	- Pole Well			
76	Ungasketed Sliding Co	ver, With Float	Ungaskeled, Sl	iding Cover			
	Gasketed Sliding Cove	r, Without Float	Gasketed Sliding	g Cover			
	Gasketed Sliding Cove	, With Float	Ungasketed Slic	ling Cover with Steeve			
	Gasketed Sliding Cover	, With Pole Sleeve	Gasketed Sliding	iliding Cover with Sleeve			
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	Gasketed Sliding Cover	, With Float, Wiper	14. Vacuum Breaker (	10° diameter well)			
	Gasketed Sliding Cover	, With Float, Sleeve,		anical Actualion, Gasketed			
	Gasketed Sliding Cover	. With Pole Sleeve, V		anical Actuation, Ungasketed			
SECTION DEAPPLICANTS Thereby certify that all information	CERTIFICATION STATE contained herein and information	MENT n submitted with this	application is true and correct.				
SIGNATURE OF PREPARER	TITLE OF PR	EPARER:		NUMBER: (805) 569-6555			
Just Ja	Gregory D			RESS: darvin@atmosphericdynamic			
CONTACT PERSON FOR INFOR	MATION ON THIS EQUIPMENT		T PERSON'S ONE NUMBER: (310) 847	DATE SIGNED: -5652			
E-MAIL ADDRESS: john.shao	@bp.com	FAX NU		-5780 02/16/2010			

CONFIDENTIAL INFORMATION:

Under the California Public Records Act, all Information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain Items as confidential; please complete the following steps:

(a) Make a copy of any page containing confidential information blanked out. Label this page "public copy."

(b) Label the original page "confidential." Circle all confidential items on the page.

(c) Brepaire a written justification for the confidentiality of each confidential item. Append this to the confidential copy.

9 South Coast Air Quality Management District, Form 400-E-18 (2006.02)



South Coast Air Quality Management District

### FORM 400-E-5

## SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, OXIDATION CATALYST, AND AMMONIA CATALYST

Mail Application To: SCAQMD P.O. Box 4944 Diamond Bar, CA 91765

> Tel: (909) 396-3385 www.aqmd.gov

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400 Permit to be Issued to (Business name of operator to appear on permit):	0A, Form CEQA, Piot Plan and Stack Form
BP West Coast Products LLC- BP Carson Refinery	
Address where the equipment will be operated (for equipment which will be moved to various locations)	ion in AQMD's jurisdiction, please list the initial location site):
2350 E. 223rd Street, Carson, Ca. 90810	
SECTION A: EQUIPMENT INFORMATION	of the control of the

SECTION A: EQUIPMEN	TINEORMATION									
STOCK CO. TO STOCK	SELECTIVE CATAL	YTIC REDUCTION (SCR)								
	Manufacturer: TBD	Catalyst Active Material: TBD: V, Tu, etc.								
	Model Number: TBD	Type: TBD (plate or honeycomb)								
SCR Catalyst	Length; Size of Each Layer or Module:  1 ft. 8.50 in.	Width:         Helght:           25 ft.         in.         38 ft.         in.								
	No. of Layers or Modules: 1 Total Volume: 1583.	330 cu.ft. Total Welght: 65000.00 lbs.								
Reducing Agent	🖰 Urea 💢 Anhydrous Ammonia 🔞 Aqueous Am	monia 30.00 % Injection Rate: b/hr.								
Reducing Agent Storage	Diameter: 7 ft in Height: 44 ft 1	1.00 in, Capacity: 12000.0 gal Pressure Setting: 30.000 psia								
Space Velocity	Gas Flow Rate/Catalyst Volume: 72000.0 hr-1									
Area Velocity	Gas Flow Rate/Wetted Catalyst Surface Area: 175.00 ft/l	Gas Flow Rate/Wetted Catalyst Surface Area: 175.00 ft/hr								
Manufacturer's Guarantee	NOx: 2.000 ppm %0 <sub>2</sub> : 15.00 NOx: gm/bhp-hr Ammonia Slip: 5.000 ppm @ 15.00 % 0 <sub>.2</sub>									
Catalyst Life	3 years (expected)									
Cost		Catalyst Replacement Cost:								
	OXIDATI( Manufacturer:	entropies. The entropies was before a state of the property and the entropies of the entropies of the property of the control								
	TBD	Catalyst Active Material: TBD: V, Tu, etc.								
Oxidation Cafalyst	Model Number: TBD	Type: TBD (plate or honeycomb)								
	Size of Each Layer or Module: Length:1 ft8.000	in. Width: 25 ft. in. Helght: 38 ft. in.								
	No. of Layers or Modules: 1 Total Volume: 158									
Space Velocity	Gas flow rate/Catalyst Volume: 72000.0 hr-1	ASA;								
Manufacturer's Guarantee	VOC 2.000 ppm VOC gm/bhp-hr	CO 4.000 ppm CO gm/bhp-hr								
	% O <sub>2</sub> 15.00 %	o <sub>2</sub> 15.00								
Galalyst ⊔fe	3 years (expected)									
Cost	Capital Cost: Installation Cost:	Catalyst Replacement Cost:								

### South Coast Air Quality Management District SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM, OXIDATION CATALYST, AND AMMONIA CATALYST

	A A A CONTROL	7 ( A. T. B. ( A. 6)	Down of	AMMONIA:	CATALYST			a State of			
	Manufacturer:			No. secondary	Catalys	t Active Material:	Carlotte Carlotte Control of the Carlotte Carlot	AND THE PARTY OF T			
	n/a	Marin da	w telepankahi miki kacapa wasa i Wayaa	materia programma esta esta esta esta esta esta esta est		·		destination of the ball of a			
State of the state	Model Number			*	Type:						
Ammonia Catalyst		and the second s						of the state of th			
		ayer or Module: Lengt					.in. Height:ft	in.			
Space Velocity		Catalyst Volume:		<u> </u>	buit	Total Beign	L IVO.				
Manufacturer's Guarantee	NH3	ppm % O <sub>2</sub>	folioide distant								
_ Catalyst Life_	de paris minima de de er de	years (expected)						rd			
Gost	Capital Cost:	In	istaliation Cost	<b>:</b>		Catalyst Repla	cement Cost:	44.			
SECTION BI OPERATIO	n informati	ON						V. 2			
Operating Temperature.	Minimum Inlet	Temperature: 680.00	oF (from cold	start) N	faximum Te	emperature: 800	).00 of	Section 1			
	Warm-up Time	3 hr.	min. (maxi	mum)							
Operating Schedule	Normal:	24 hours/da	ı <b>y</b>	7. days	lweek	52 week	kslyr.				
	Maxlmum:	24 hoursida	у	7 days	lweek	52 weel	kslyr.				
SECTION C: APPLICANT			ièd with this goo	fication is true	and correct						
SIGNATURE OF PREPARER:		TITLE OF PREPARER					(805) 569-6555	N. S. D. C. S.			
They I	and I	Consultant	mentere e springen intelligence in er sur	PREPARE	₹'S E-MAIL	ADDRESS: darv	in@atmosphericdy	/namic			
CONTACT VERSON FOR INFO			CONTACT P		(310)	847-5652	DATE SIGNED:	- 1			
E-MAIL ADDRESS: john.sha		artina di Santa da Maria da M	FAX NUMBI	e number: er:		847-5780	02/16/2010				

CONFIDENTIAL-INFORMATION

Under the California Public Records Act; all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep cartain items as confidential, please complete the following steps:

(a) Make a copy of any page containing confidential information blanked out: Label this page "public copy"

(b) Label the original page "confidentials". Circle all confidential items on the page.

(c) Prepare a written justification for the confidentials of each confidential tiems. Append this to the confidential copy.

# ATTACHMENT A PERMIT APPLICATION FEE CALCULATIONS

ueous Ammonia	A01-0046391	ohn Shao	
PERMIT APPLICATION FEE FOR: Carson Steam Project _ Aq	BP File Number:	BP Project Engineer:	

Apply Penalty For Identical Operating Apply Total Unit Fee Without A Expedite Application Discount? Fee? Fees	o No No \$ 2,051.52
Base Application Fee	\$2,051.52
Application Purpose	
Schedule Schedule Description	Storage Tank, Ammonia
Schedule	В
System ID	×
Process ID	17
Device ID Previous A/N Process ID System ID	N/A
Device ID	N/A
Device	Aqueous Ammonia Storage Tank

Subtotal:

RECLAIM & Title V Permit Amendment Fee:

Total Fees:



February 24, 2010

BP West Coast Products LLC
BP Carson Refinery
2350 E. 223rd Street
Mailing Address: Box 6210
Carson, California 90749-6210
United States of America

Telephone: +1 (310) 816-8100

South Coast Air Quality Management District Attn: Permit Processing 21865 Copley Drive Diamond Bar, CA 91765-4182

Subject: Application for Change of Condition to Watson Cogeneration Units

1-4 (Watson Cogeneration Steam and Electric Reliability Project)

Reference: Watson Cogeneration Company at the BP Carson Refinery (Facility ID

131003; Process 17, Systems 1-4)

### Dear Sir/Madam:

Enclosed, please find permit applications for Change of Condition to the Watson Cogeneration Units 1-4 (Process 17, Systems 1-4) of the BP Carson Refinery permit (Facility ID 131003). These applications are submitted as part of the Watson Cogeneration Steam and Electric Reliability Project (SCAQMD permit application numbers 496922, 496924 and 496925) and will be used to replace permit references indicating "common to cogeneration units 1,2,3,& 4" with "common to all cogeneration systems" as well as allowing the application of a common PM-10 emissions limit. A check in the amount of \$27,355.19, based on Rule 301 application fees, is enclosed along with the supporting documentation necessary for completing this permit review.

Please note that permit application forms 500-A2 and 500-C1 were submitted previously as part of pending application numbers 496922, 496924 and 496925 and have not been re-submitted as part of this permit application package. Additionally, please note that, per the directive from Jay Chen (SCAQMD; Senior Manager), Forms 500-C2 are not to be submitted with each individual permit application package. Rather, up to date Forms 500-C2 will be submitted to the SCAQMD, as requested, and immediately prior to each re-issuance of the Title V permit. No Forms 500-C2 are submitted with this current permit application package.

Also included with this permit application submittal is a request to remove the No. 4 Steam Plant (Process 18, System 1) from the permit; the SCAQMD form necessary to request this change (form titled "Request to Inactivate a Permit to Operate") has been included in this permit application package.

Permit Processing February 24, 2010 Page 2 of 2

Please call me at (310) 847-5652 if you have any questions or comments regarding the enclosed package.

Sincerely,

John Shao

**Environmental Project Engineer** 

### **Enclosures**

CC:

BP Env. File 06A01-0046391 (with attachment)

Ross Metersky – BP (with attachment)

Tom Lu – Watson Cogeneration Company (with attachment)

ecc: ECC 2010-02-18 AQMD Permit for Change of Condition in Existing 4 Trains for

Watson Cogeneration Steam and Electric Reliability Project (cover letter only)

Eric Daley – BP (cover letter only) Alan Seese – BP (cover letter only)

Scott Hawley - Watson Cogeneration Company (cover letter only)

**Watson Cogeneration Company** 

046902

INVOICE NO

DISCOUNTMOUNT

NET AMOUNT

02/17/10

DATE

6A01004639

27,355.19

.00

27,355.19

CHECK: 046902 02/22/10 So.Coast Air Quality Mgmt Dist CHK TOTAL:

27,355.19

WCC-6000-A

### THE FACE OF THIS CHECK HAS A COLORED BACKGROUND - NOT A WHITE BACKGROUND

Watson Cogeneration Company

22850 South Wilmington Avenue Carson, California 90745-6203

Citibank Delaware A SUBSIDIARY OF CITICORP ONE PENN'S WAY NEW CASTLE, DE 19720

02/22/10

Amount

046902 ===

\*TWENTY SEVEN THOUSAND THREE HUNDRED FIFTY FIVE DOLLARS AND 19

So.Coast Air Quality Mgmt Dist

21865 Copley Drive

CA 91765-4182

38553567#



South Coast Air Quality Management District P. O. Box 4944 Diamond Bar, CA 91765

Printed Name of Responsible Official of Organization

Signature of AQMD Inspector (Optional)

Attn: Permit Services - Data Entry

## REQUEST TO INACTIVATE A PERMIT TO OPERATE

Date

PERMIT ISSUED TO:			
1. Current Facility ID:	131003		
2. Company Name:	BP West Coast Products LLC BP Cars	son Refinery	
3. Company Address:	2350 East 223rd Street, Carson, CA	90810	
4. Permit Number:	435241 Date Iss	sued: Unk.	
5. Equipment Description	: Process 18, System 1; Number 4	Steam Plant (No. 42 boile	er and associated equipment).
Reason for Inactivation:			
Cancellation of the Peri Check all that apply:	mit to Operate described above is he	ereby requested for the fo	llowing reason(s).
☐ Equipment ○ So	Id C Destroyed or C Remove	ed from premises. Effect	ive Date:
Equipment was rep	placed with (New Permit Number):		
▼ Equipment will no	longer be used. Date of disconnecti	ion: Unknown; historic c	occurrence
Equipment is exem	npt form permit requirements by AQ/	MD Rule 219.	
Business & Equipme	nt Sold. Effective Date:		
Name and Address	of new owner:		
Other (explain):			
It is understood that a the laws then in effec	ny future use of this equipment may rect.	equire a new permit applic	cation in accordance with
Required Signatures:			
<u> </u>		Environmental Manage	
Signature of Respon	sible Official of Organization		Title
Alan Seese		0	2 halin

Mail Application To: P.O. Box 4944 Diamond Bar, CA 91765

> Tel: (909) 396-3385 www.aqmd.gov

### **Application For Permit To Construct and Permit To Operate**

1. (			an An Tha Ban					····	e ethical				1.3.3803, 44.11.
BP	Business Name of Op West Coast Pr				nerv								
2. \	Valid AQMD Facility II	ACAT HARMANIAN PHARMS STUDIO AND STUDIO A STUDIO AND ST	actionistic contraction of the programme and the	Hartel #2000 warrens opgevende georgespropsprop	Owner's Business Na	me (onl	y If diffe	rent from Bu	siness Name o	f Operato	or):	E000 X000m det ti duiseast a's subment ours nor	**************************************
	issued by AQMD):	131003	New Paragraphic Control of the Contr	.	Vatson Cogenerat	ion C	ompa	ny	-				
Sec	tion B: Equipme	ent Location	N. A.			Sec	tion C	: Permit N	failing Add	Iress	-		A District Control of the Control of
4.	Equipment Location A For equipment operate		ons in AQMD's j	unsdiction, pr	rovide address of initial site	1		-	ndence Inform as equipment l		dress		. 19-10-12-13
	0 E. 223rd Stre	et	**************************************	1965 a vil annahril krit anvilničniho ti habatu a de	d abortion that the same of a factor was properly action to the contract	P.O. Box 6210 Street Address							
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City		**************************************	State	Zip Code	The state of the s	City	13011	odde Mariadouro (a faunt moderett mar vedadoler	kittii kurrustindrittetuumrivuus muu vurr	Sta	,	Zip Code	
	ty: 🕟 Los Angeles		🔿 Šan Berna	ardino 🔘	Riverside								
Conta	act Name: John S	hao	as aran mās taspiens das assertina	TO 1 A S CONTRACTOR N POSSESS	2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A 2 A	Conta	act Nam	John S	hao	**************************************	make we had been a	E-PC-PC-PA-045797999999482954979899	N. Olivetrika and desilver orderess treasumer sooms arrough supproporphishing
Conta	act Title: Environ	nental Proje	ect Engr.	Phone:	(310) 847-5652	Conta	act Title:	Environn	nental Proj	ect En	gr.	Phone: (31	0) 847-5652
Fax:	(310) 847-578	0 E-M	<sub>ail:</sub> john.sh	ao@bp.d	com	Fax:	(310	847-578 (	0	E-Ma	<sub>ail:</sub> jol	nn.shao@	bp.com
Sec	tion D: Applicati	on Type	The facility	is in O	RECLAIM O Tit	le V	⊙ RI	CLAIM &	Title V Pro	ogram	(pleas	se check if	applicable)
6.	Reason for Submittin								rt Date of Ope				YYYY):
_	New Construction (P	ermit to	Permitt	ted Equipme	nt Altered/ Modified Witho	ut	8.	Description o	f Equipment:				02/01/2010
<b>V</b>	Construct)		Permit	Approval*				-		ngenera	tion L	Init No. 1\	
C	Equipment Operating Permit or Expired Pe		C Propos Equipm		/Modification to Permitted	Process 17, System 1 (Cogeneration Unit No. 1)							
$\circ$	Administrative Chang	je	Change	Change of Condition For Permit To Operate									
C	Equipment On-Site B Constructed or Open		C Change	Change of Condition For Permit To Construct				9. Is this equipment portable AND will it be operated at different locations within AQMD's jurisdiction?    No  O					
C	Title V Application (li etc.)	nitial, Revisions,	C Chang	e of Locatior	-Moving to New Site		For <u>Identical</u> equipment, how many additional applications are being submitted with this application? (Form 400-A required for each)  3						oh)
$\cap$	Compliance Plan		(If you checke	d any of the iter	rmit/Application Number: ns in this column, you MUST offication Number)	11. Are you a Small Business as per AQMD's Rule 102 definition?						***************************************	
$\circ$	Facility Permit Amen	dment	411168		nication Nottberry							ss,   No C Y	
0	Registration/Certification	ntion	a tanking pythogan distribution of the		and a subsequent part of the first state of the fir					OV) or a I	Notice '	To Comply (N	C) been issued for
$\circ$	Streamlined Standar	d Permit					1	his equipme					
	gher Permit Processing	·		h an asterisk	(Rule 301 (c) (1) (D)		<u> </u>	<del> </del>	<b>⊙</b> № ○ Y	es If yes	, provid	e NOV/NC #:	And the second s
	tion E: Facility B									A . 194			
	What type of business roleum Refining	_	ucted at this ed	quipment lo	cation?	14.			sses primary I rial Classificatio			49.4 / \$25.48 VORTON #F5.00 (19.5 ) \( \sigma \)	324110
	re there other facilitie y the same operator?		MD jurisdiction	n operated	O No ⊙ Yes	16.		re any schoo ient physical	Is (K-12) withi location?	n a 1000-	ft. radiı	us of the	● No ○ Ye
			ure i hereby co	ertify that all in	nformation contained herein	and info	rmation s	ubmitted with t	nis application is	true and o	correct.		
17. S	ignature of Responsi	ble Official:			18. Title:							eck List	
	allo	2	hen		Environmental Ma	anage	er		Form(s) sig				fficial or 400-E-GEN)
19. P	rint Name:	-			20. Date:				CEQA For	•	,		
Ala	n Seese	olangi (1947) ng mga mga mga mga mga mga mga mga mga mg	······································	which the presence constructs	02/19/10				Payment for Your application				ed e items are missing.
	*CMD	LICATION/TRA	CKING #	TVPE	EQUIPMENT CATEGO	DRY CO	DE.		FEE SCHE	DULF:	I VALI	DATION	
	AQMD APP SE ONLY	LOS HOR TRA	t <i>3</i> #	TYPE B C D		50			\$				
ENG.	A R	ENG. A	R	CLASS	ASSIGNMENT	•		CHECK/MOI	NEY ORDER	AMQUI	TV	Tracking #	

DATE

I III IV

Unit

Engineer



Mail Application To: SCAQMD P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEQA, Plot Plan and Stack Form

Permit to be issued to (Business name of operator to appear on permit):

BP West Coast Products LLC - BP Carson Refinery

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site):

2350 E. 223rd Street, Carson, CA 90810

• Fixed Location

Various Locations

SECTION A: EQUIPMEN	T INFORMATION									
	Manufacturer: General Electric									
	Model No.: PG7111EA		Serial No.:							
Turbine	Size (based on Higher He	ating Value - HHV):								
(NO CHANGE)	Manufacturer Maximum Input Rating:MMBTU/hrkWh									
	Manufacturer Maxim	um Output Rating:	MMBTU/hr	kWn						
estanting of the second		Driving Pump/Co	mpressor	Emergency Peakin	g Unit					
(Check all that apply) (NO CHANGE)	★ Steam Generation	Exhaust Gas Rec	Other (specify):							
Cycle Type (NO: CHANGE)	<ul><li>○ Simple Cycle</li><li>⊙ Combined Cycle</li></ul>	C Regenerati		PARAMETER STATE TO THE STATE OF						
Combustion Type (NO CHANGE)	○ Tubular	Can-Annula	ir	O Annular						
Fuel (Turbine) (NO CHANGE)	C Landfill Gas*	O Propane	Digester Gas* Refinery Gas* er are checked, atta	• Other*: Bu	ane higher heating value and sulfur					
Heat Recovery Steam Generator (HRSG) (NO CHANGE)	. High Pressure Steam Oui	put Capacity:  ut Capacity:	lb/hr@	9F						
	Manufacturer: John Zink				Model:					
Duct Burner	Number of burners:	Rating of each burner (HH	V):							
(NO CHANGE)	Type: Other:	(please attach manufacturer								
Fuel (Duct Burner) (NO CHANGE)	Refinery Gas*	_	Digester Gas* Propane ecked, attach fuel ana	Other*:						

### **GAS TURBINE**

Residence of the contract of t	Γ							
Harris (1997) (1	Selective Catalytic	Reduction (SCR	)*	C Select	tive Non-c	atalytic Reduct	ion (SNCR)*	
e de Sakarak da seregik pla Az en Strofen de kasarten de fak	Oxidation Catalyst	*		Other	(specify)*	***************************************	errorente in de deutsch in de de de de deutsch	
Air Pollution Control	Steam/Water Inject     Injection B	tion: ate:	lha watar <i>i</i> iha	fuol au			ata £l	
(NO CHANGE)	* Separate application is		IUS. Waterilos.	idei, <b>01</b>	71.71.71.8 Lu-7.6 Lu-1.	mole watening	ole iliei	
	Capital Cost:		Installation C	ost:			Annual Oper	ating Cost:
	Manufacturer:				Model:			
		***************************************					- A	
	Catalyst Dimensions:	Length:	ft	_in. V	Vidth:	ft	_in. Heigh	nt:ftin.
	Catalyst Cell Density: _	cel	s/sq. in.		Pressu	re Drop Across	Catalyst:	
Oxidation Catalyst Data (If Applicable)			Control Efficier	ıcy:	%	Catalys	st Life:	угѕ.
(NO CHANGE)	Manufacturer's Guarant		Control Efficie	ency;	%	Operati	ng Temp. Rang	e:oF
	Space Velocity (gas flor			1		s flow/wetted ca		
	rate/catalyst volume):			surface	area):			
	VOC Concentration into	Catalyst:	PPMVD @	15 % O <sub>2</sub>	CO Cond	centration into (	Catalyst:	PPMVD @ 15 % O <sub>2</sub>
			Sylver of the second					
SECTION B: OPERATIO	N INFORMATION	Maximum	n Emissions Be	ia a Carte	an c	u.		ns After Control
	Pollutants	PPM@15%O	Statistical Section 2011	lb/Hou	ografia irlinda 2013. gada takan si		%O <sub>2</sub> dry	Ib/Hour
	ROG							A Section of the Sect
	NOx							
	1124 - 38 4 CO						**************************************	
On-line Emissions Data	PM10		Andrew An					
(NO CHANGE)	SOx	**************************************	and the second of the second o	V. обобобобот и и для на довогот и А.у. на	enemento e en electron en enemento de esta esta en esta en electron en electro	Technological Complex Company of	**************************************	Motormore (1973) AT delicine (Motorial Malamore more property page page 1995)
	NH3		The second of th					
	Reference (attach data):		* Based	on tempera	ature, fuel o	consumption, an	d MW output	
	Manufacturer Emis		EPA Emissi	on Factors	. [	AQMD Emiss	sion Factors	Source Test
	Stack Height:	ftin.	s	tack Diame	eter:	ft	_in.	
Stack or Vent Data	Exhaust Temperature:	F	E	haust Pre	ssure:	inch	es water column	ı
(NO CHANGE)	Exhaust Flow Rate:	CFM		xygerLev				
Operating Schedule	Normal:	24 hours/day		7 days	/week	52	weeks/yr	
(NO CHANGE)	Maximum:	24 hours/day		_			weeks/yr	

### **GAS TURBINE**

Startup Data (NG CHANGE)	No. of Startups per day:	No. of Startup	s per year:	Duration of each startup:	hours
Shutdown Data (NO CHANGE)	No. of Shutdowns per day:	No. of Shutdo	wns per year:	Duration of each shutdown:	hours
Managaria (1918) Spring a second and from	Dellutonto	Startup Er	nissions	Shutdown Emi	ssions
	Pollutants PPN	1@15% O <sub>2</sub> , dry	lb/Hour	PPM@15% O <sub>2</sub> , dry	lb/Hour
	ROG		•		
	NOx				Additional and appropriate the control of the contr
Startup and Shutdown Emissions Data	со				
(NO CHANGE)	PM10				
	SOx			***	
and the second section of the second section of the second section of the second section secti	NH3				
	Continuous Emission Monitoring	System (CEMS)		THE SAME AND A SECOND CO. S.	
			CEMS Model:		***************************************
	Will the CEMS be used to measu	re both on-line and s	tartup/shutdown emission	ns? C Yes C No	
Monitoring and Reporting	The following parameters will be	continuously monit	ored:		
(NO CHANGE)	≥ NOx		<b>≥</b> 0 <sub>2</sub>		
	Fuel Flow Rate 🗷 Amm	onia Injection Rate	Other (specify)		arrange and the second arrange.
	Ammonia Stack Concentration				
essa a seri selevis Definitación eque sele		Ammonia C	EMS Make	A STATE OF S	
SECTION CONTRIBUTION	SERTIFICATION OF SECTION	operatory seconds, and	entistication of the first of the control of the con-	egaletye, ta 25th. To be a first to	
	CERTIFICATION STATEME of contained herein and information si		lication is true and correct.		
SIGNATURE OF PREPARER:	TITLE OF PREP			NE NUMBER: (805) 764-60	03
Mulu (1) la	Environment	al Engr.		DDRESS: mwaller@algcorp	CONTRACTOR
	RMATION ON THIS EQUIPMENT:	CONTACT PI	RSON'S	DATE SIGNE	A THE RESIDENCE AND A PROPERTY OF A SECOND PROPERTY
John Shao			E NUMBER: (310) 847		
E-MAIL ADDRESS: john.sha	o@bp.com	FAX NUMBI	R: (310) 847	-5780 /1/0	12010

CON	FIDEN	ITIAL IN	FORM	IOITAI

Under the California Public Records Act, all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain items as confidential, please complete the following steps:

(a) Make a copy of any page containing confidential information blanked out. Label this page "public copy."

(b) Label the original page "confidential." Circle all confidential items on the page.

(c) Prepare a written justification for the confidentiality of each confidential item. Append this to the confidential copy.

Page 3 of Serial Number

Mail Application To: P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385

### **Application For Permit To Construct and Permit To Operate** www.agmd.gov Section A: Operator Information 1. Business Name of Operator To Appear On The Permit: BP West Coast Products LLC - BP Carson Refinery Valid AQMD Facility ID (Available on Permit or Invoice 3. Owner's Business Name (only If different from Business Name of Operator): issued by AQMD): 131003 Watson Cogeneration Company Section B: Equipment Location Section C: Permit Mailing Address Equipment Location Address: Permit and Correspondence Information: For equipment operated at various locations in AQMD's jurisdiction, provide address of initial site Check here if same as equipment location address 2350 E. 223rd Street P.O. Box 6210 Street Address Street Address Carson Carson 90749 \_ 6210 City City Zip Code County: Los Angeles Orange San Bernardino Riverside Contact Name: John Shao Contact Name: John Shao Contact Title: Environmental Project Engr. Phone: (310) 847-5652 Contact Title: Environmental Project Engr. Phone: (310) 847-5652 Fax: (310) 847-5780 E-Mail: john.shao@bp.com (310) 847-5780 E-Mail: john.shao@bp.com Section D: Application Type The facility is in ORECLAIM ○ Title V • RECLAIM & Title V Program (please check if applicable) 7. Estimated Start Date of Operation/Construction (MM/DD/YYYY); 02/01/2010 6. Reason for Submitting Application (Select only ONE): New Construction (Permit to Permitted Equipment Altered/ Modified Without 8. Description of Equipment: Construct) Permit Approval\* Process 17, System 2 (Cogeneration Unit No. 2) **Equipment Operating Without A** Proposed Alteration/Modification to Permitted Permit or Expired Permit\* Equipment C Administrative Change Change of Condition For Permit To Operate Equipment On-Site But Not Change of Condition For Permit To Construct is this equipment portable AND will it be operated at Constructed or Operational No () Yes different locations within AQMD's jurisdiction? Title V Application (initial, Revisions, Change of Location—Moving to New Site 10. For Identical equipment, how many additional applications are being etc.) submitted with this application? (Form 400-A required for each) Existing Or Previous Permit/Application Number: Compliance Plan (If you checked any of the items in this column, you MUST 11. Are you a Small Business as per AQMD's Rule 102 definition? provide a existing Permit/ Application Number, Facility Permit Amendment (10 employees or less and total gross receipts are \$500,000 or less, No ○ Yes 411169 or a not-for-profit training center?) Registration/Certification 12. Has a Notice of Violation (NOV) or a Notice To Comply (NC) been issued for this equipment? C Streamlined Standard Permit \* A Higher Permit Processing Fee applies to those items with an asterisk (Rule 301 (c) (1) (D) No O Yes If yes, provide NOV/NC #: Section E: Facility Business Information 13. What type of business is being conducted at this equipment location? What is your businesses primary NAICS Code 324110 (North American Industrial Classification System)? Petroleum Refining 15. Are there other facilities in the SCAQMD jurisdiction operated Are there any schools (K-12) within a 1000-ft. radius of the by the same operator? O No Yes equipment physical location? No Yes Section F: Authorization/Signature I hereby certify that all information contained herein and information submitted with this application is true and correct. 17. Signature of Responsible Official: 18. Title: Check List Form(s) signed and dated by authorized official Environmental Manager Supplemental Equipment Form (400-E-XX or 400-E-GEN) 20. Date: CEQA Form (400-CEQA) attached 19. Print Name Payment for permit processing fee attached Alan Seese 02/19/10 Your application will be rejected if any of the above items are missing.

AQMD APPLIC USE ONLY	ATION/TRACKING #	TYPE B C D	EQUIPMENT CATEGORY CODE:	FEE SCHE \$	DÜLE: VALI	DATION
ENG. A R EN	IG. A R	CLASS	ASSIGNMENT C	CHECK/MONEY ORDER	AMOUNT	Tracking #
DATE DA	ATE	1 111 17	Unit Engineer #	#	\$	



Mail Application To: SCAQMD P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form C	CEQA, Plot Plan and Stack Form	www.aqmd.gov
Permit to be issued to (Business name of operator to appear on permit):	· · ·	
BP West Coast Products LLC - BP Carson Refinery		
Address where the equipment will be operated (for equipment which will be moved to various location in AQM	MD's jurisdiction, please list the init	tial location site):
2350 E. 223rd Street, Carson, CA 90810	Fixed Location (	○ Various Locations

	55 (15 (15 (15 (15 (15 (15 (15 (15 (15 (	Avalenta (v. 1112) et meste	A STATE OF THE STA		
SECTION A: EQUIPMEN	TINFORMATION				
	Manufacturer: General Electric				
längi kanging et 1966, si ka Ku a kanging dan kanging a	Model No.:			Serial No.:	
	PG7111EA				
Turbine	Size (based on Higher He	ating Value - HHV):			
(NO CHANGE)	Manufacturer Maxim	ım Input Rating:	MMBTU/h	arkWh	
	Manufacturer Maxims	ım Output Rating:	MM8TU/h	ır kWh	
Function	Electrical Generation	Driving Pum	p/Compressor	Emergency Peakin	g Unit
(Check all that apply) (NO CHANGE)	Steam Generation	Exhaust Gas	Recovery	Other (specify):	
Cycle Type	O Simple Cycle	○ Regen	erative Cycle		
(no change)	Combined Cycle	Other	(specify):		
Combustion Type (NO CHANGE)	O Tubular	⊙ Can-Ar	nular	O Annular	
Fuel (Turbine) (NO CHANGE)	C Landfill Gas* (	DEPG Propane as, Refinery Gas, and/o	O Digester Gas* Refinery Gas* Other are checked,	Other*: Bu     attach fuel analysis indicating	tane higher heating value and sulfur
	Steam Turbine Capacity	MW			,
Heat Recovery Steam Generator (HRSG) (NO CHANGE)	Low Pressure Steam Outp	ut Capacity:			
	Superheated Steam Outpu	t Capacity:	lb/hr@	°F	
	Manufacturer:				Model:
	John Zink			Andrew memorine make make make a m	and with the of the control december y propagation and the depth and the control of the control
	Number of burners:	Rating of each burner	(HHV):		
Duct Burner	PROTECTION OF THE PROTECTION AND ADMINISTRATION ADMINISTRATION AND ADMINISTRATION ADMINISTRATION AND ADMINISTRATION	Annual annual of the property of the Control of the	THE PROPERTY OF THE PROPERTY O		
(NO CHANGE)	<b>T</b>	olease attach manufact	urer's specification	s)	
	Type: Other:	The Control of the Co			<b>3</b> ,1
		-	tions with the HRSG	and temperature profile	
Fuel	-	〕LPG 〕Landfill Gas*	O Digester Gas* O Propane	C Others	
(Duct Burner) (NO CHANGE)	•	•		Other* ; analysis indicating higher heating	value and sulfur content).

### **GAS TURBINE**

	Selective Catalyti	ic Reduction (SCR	)*	O Select	tive Non-c	atalytic Reducti	on (SNCR)*	
	Oxidation Catalys	st*		Other	(specify)*		***************************************	
Air Pollution Control (NO CHANGE)	Steam/Water Injection     Injection     * Separate application is	Rate:	_lbs. water/lbs	. fuel, or		mole water/mo	ile fuel	
	Capital Cost:		Installation	Cost:	<del></del> .	++·.	Annual Oper	rating Cost:
	Manufacturer:		-		Model:			**************************************
	Catalyst Dimensions:	Length:	ft.	in. W	/idth:	ft.	_in. Heigl	ht:in_
	Catalyst Cell Density:	cell	s/sq. in.		Pressu	re Drop Across	Catalyst:	
Oxidation Catalyst Data (If Applicable) (NO CHANGE)	Manufacturer's Guara	ntee	Control Efficie				et Life:	yrs. 
	Space Velocity (gas fix rate/catalyst volume):	ow	Moneyagase	Area Ve surface		flow/wetted ca	talyst	
en rap pri pri superior de servicio de la companio de la companio de la companio de la companio de la companio Companio de la companio de la compa	VOC Concentration in	to Catalyst:	PPMVD @	15 % O <sub>2</sub>	CO Conc	entration into (	atalyst:	PPMVD @ 15 % O <sub>2</sub>
SECTION B: OPERATIO	N INFORMATION		e Karanasi	8 8 W. L			an numerica	
		Maximun	n Emissions B	efore Contro	ol*	Max	imum Emissio	ns After Control
	Pollutants	PPM@15%O	, drý	lb/Hou		grant and the second of the second of	%O <sub>2</sub> , dry	Control Commented to Fig. 19. (19. (19. (19. c))
	ROG	VARIOUS distribute describement suppresses			OA Medicial straighten on thems			
	NOx							
On-line	CO		4	· · · · · · · · · · · · · · · · · · ·		All Married Incomments and Married Incomments		
Emissions Data	PM10	***************************************		- Mariante Anno Accordancy ( Program				VANCO A Anharmanian and a construction of the
(NO CHANGE)	<b>50</b> x							
	NH3							
	Reference (attach data	•	* Based	-		consumption, and	·	Source Test
	Stack Height:	ftin.	(	Stack Diame	eter:	ft	in.	
Stack or Vent Data	Exhaust Temperature:	<sup>0</sup> F	Ë	xhaust Pre	ssure:	inche	s water columr	1
(NO CHANGE)	Exhaust Flow Rate:	CFM		OxygerLeve	el:	······································		
Operating Schedule	Normal:	24 hours/day	**************************************	7 days/	week	52	weeks/yr	
(NO CHANGE)	Maximum:	24 hours/day	<u> </u>	7 days/	week	52	weeks <i>l</i> yr	

Startup Data (NO. CHANGE)	No. of Startups per day:	No, of Startu	ps per year:	Duration of each	startup:	hours
Shutdown Data (NO CHANGE)	No. of Shutdowns per day:	No. of Shutd	owns per year:	Duration of each	shutdown:	hours
	Pollutants	Startup E	missions		Shutdown Emiss	ions
	POliutants	M@15% O <sub>2</sub> , dry	lb/Hour	PPM@15	% O <sub>2</sub> , dry	lb/Hour
	ROG					
	NOx .			Victoria (No. 1)		Links of the Control
Startup and Shutdown Emissions Data	со					
(NO CHANGE)	PM10			***************************************		
	SOx			***************************************		
A Least reference (Carlotte Control of the Carlotte Co	NH3					
	Continuous Emission Monitorin	g System (CEMS)	CEMS Make:			
	Will the CEMS be used to measi	ure both on-line and	startup/shutdown emis:	sions? O Yes	O No	
Monitoring and Reporting	The following parameters will be	e continuously mon	itored:			
(NO CHANGE)	⊠ NOx ⊠ CO		<b>⋈</b> 0 <sub>2</sub>			
	▼ Fuel Flow Rate	nonia Injection Rate	Other (specify)			
	Ammonia Stack Concentrat	tion: Ammonia	CEMS Model	······································		
and the second of the second o		Ammonia	CEMS Make			and the same of th
SECTION C: APPLICANT I hereby certify that all information	CERTIFICATION STATEM in contained herein and information in		olication is true and corre			
SIGNATURE OF PREPARER:	N TITLE OF PREI	PARER:	PREPARER'S TELEP			
Mulie 11	Environmen	tal Engr.		4444		
	RMATION ON THIS EQUIPMENT:	CONTACT	PERSON'S		DATE SIGNED:	
John Shao		•	NE NUMBER: (310) 8	47-5652	2/10/	2010
E-MAIL ADDRESS: john.sha	o@bp.com	FAX NUME	BER: (310) 8	4 <b>7-</b> 5780	2/18/	WIU

																							C		

CONFIDENTIAL INFORMATION

Under the California Public Records Act, all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain items as confidential, please complete the following steps:

(a) Make a copy of any page containing confidential information blanked out. Label this page "public copy."

(b) Label the original page "confidential." Circle all confidential items on the page.

(c) Prepare a written justification for the confidentiality of each confidential item. Append this to the confidential copy.

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Page 3 of

Mail Application To: P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385 www.aqmd.gov

### **Application For Permit To Construct and Permit To Operate**

Section A: Operator Information							
Business Name of Operator To Appear On Ti BP West Coast Products LLC – BP		nery					·
2. Valid AQMD Facility ID (Available on Permit of	or Invoice 3.	Owner's Business Na	me (onl	y If different from Bu	siness Name of Operat	or):	Overheitschen Literation für Amerikann war und der geweiter der geschlieben geschweits der
issued by AQMD): 131003	<u> </u>	Watson Cogenera	tion C	ompany	MANAGAMAN MANAGAMAN SACRESSACON, ACOMPACA ECONOMICO CONTRACTOR ACOMPACA A CONTRACTOR A SACRESSACON ACOMPACA A	anthon common operacionme e programa E.S. personales (recessos), describiscos	#2.00 miles iyo yo ya ya ya waxaa ka k
Section B: Equipment Location			Sec	tion C: Permit	Mailing Address		
Equipment Location Address:     For equipment operated at various locations in AC	QMD's jurisdiction, pr	rovide address of initial site	5.		ondence Information: ne as equipment location ac	fdress	
2350 E. 223rd Street Street Address	** ** E172917/E202100000-Gas abdor Graduscherings		elizabeth house	O. Box 6210 et Address		opportunities transce transcription of physician property (1998) (1998)	<ol> <li>по на задажение помене умере про за регора выборанно учение.</li> </ol>
Carson	CA, 908	10 _	Ca	rson	CA	90749	_ 6210
	State Zip Code	Appeal opposed to the control of the	City	, and a decision of extract of the character is not a consistent of a natural system of a specific particular po	Martin Coff Karley Self Colores Chall Self-of Economic and all the security sur-	ate Zip Code	- HEREN PERSON AND AND AND AND AND AND AND AND AND AN
County:	Bernardino 🔘	Riverside					
Contact Name: John Shao	observation on a senso promote state of page	SOO PROPOSE PARRIERA SASSIELE NA HEISPANTSOND XAANSOO OO DOOR	Conta	act Name: John S	Shao	ESSMESSMESSMESSMESSMESSMESSMESSMESSMESS	nn y norman fra sklodet i <mark>medeskripten</mark> en de 1 re europout schodebender
Contact Title: Environmental Project En	gr. Phone:	(310) 847-5652	Conta	act Title: Environr	nental Project En	gr. Phone: (3	10) 847-5652
Fax: (310) 847-5780 E-Mail: joh	n.shao@bp.d	com	Fax:	(310) 847-578	30 E-M	<sub>ail:</sub> john.shao@	bp.com
	cility is in O	RECLAIM O Tit	le V	<b>⊙</b> RECLAIM 8	Title V Program	(please check i	if applicable)
6. Reason for Submitting Application (Select or	nly ONE):			7. Estimated St	art Date of Operation/Co	onstruction (MM/DD	/YYYY): 02/01/2010
	Permitted Equipmer Permit Approval*	nt Altered/ Modified Witho	ut	8. Description	of Equipment:		100000000000000000000000000000000000000
	.,			Process 17, S	System 3 (Cogenera	ition Unit No. 3)	
	Proposed Alteration Equipment	/Modification to Permitted				·	
C Administrative Change	Change of Condition	n For Permit To Operate					
Equipment On-Site But Not Constructed or Operational	Change of Condition	n For Permit To Construct	t		ment portable AND will i ations within AQMD's ju		No
Title V Application (Initial, Revisions, etc.)	Change of Location	Moving to New Site		10. For <u>Identical</u>	equipment, how many a th this application? (For	additional applicatio	ns are being
Compliance Plan (If you	checked any of the iten	mit/Application Number: ns in this column, you MUST			nall Business as per AQ	•	and a succession of the succes
Facility Permit Amendment	le a existing Permit/ App 1170	lication Number)		· (10 employees	or less <u>and</u> total gross rece fit training center?)	eipts are \$500,000 or le	ess,   No   Yes
Registration/Certification	a mai finge filo. If them I wind to a conditional about a position of the second second conditions and conditions.	ССУД бол 600 бой 1,4 к б. 2-до удочивани и и ч. Альстиция учестициях		1	of Violation (NOV) or a I	Notice To Comply (N	IC) been issued for
Streamlined Standard Permit				ano oquipino		neovádo NOVVNO V	
* A Higher Permit Processing Fee applies to those iter		(Rule 301 (c) (1) (D)	** , **		● No ○ Yes If yes	, provide NOV/NC #:	A.V
Section E: Facility Business Informati  13. What type of business is being conducted at the second conducted conducted at the second conducted condu		cation?	14.	What is your busing	esses primary NAICS Co	ada.	7.71
Petroleum Refining	uno equipment lo	Ladons	'*.	(North American Indus	itrial Classification System)	? ?	324110
15. Are there other facilities in the SCAQMD juriso by the same operator?	diction operated	O No ⊙ Yes	16.	Are there any school equipment physical	ols (K-12) within a 1000- l location?	ft. radius of the	⊙ No ⊜ Yes
Section F: Authorization/Signature the	reby certify that all in	formation contained herein	and infor	mation submitted with	this application is true and o	correct.	
17. Signature of Responsible Official:		18. Title:				Check List	
Man St	er .	Environmental M	anage	er .	Form(s) signed and Supplemental Equip	ment Form (400-E-X)	
19. Print Name:		20. Date:			CEQA Form (400-C	EQA) attached	
Alan Seese	Wydright [propose his namenonication]	02/19/10		The second of th	Payment for permit property Your application will be rej	_	
AQMD APPLICATION/TRACKING #	7/05	EQUIPMENT CATEGO	אר כטי	ne.	FEE SCHEDULE:	VALIDATION	
USE ONLY	ВСр		OUL		\$		
ENG. A R ENG. A R	CLASS	ASSIGNMENT		CHECK/MO	NEY ORDER   AMOUN	∜T Tracking #	#

Engineer

DATE



Mail Application To: SCAQMD P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEQA, Plot Plan and Stack Form

Permit to be Issued to (Business name of operator to appear on permit):

BP West Coast Products LLC - BP Carson Refinery

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site):

2350 E. 223rd Street, Carson, CA 90810

• Fixed Location • Various Locations

SECTION A: EQUIPMEN	TINFORMATION		este all complete en la lavat	
	Manufacturer:			
	General Electric  Model No.:		Serial No.:	
Turbine	PG7111EA			
(NO CHANGE)	Size (based on Higher He Manufacturer Maxim	anng value - rirv): um Input Rating: MMBT	U/hr k₩h	
		ım Output Rating: MM8T		
Function	Electrical Generation	☐ Driving Pump/Compressor	☐ Emergency Peakin	g Unit
(Check all that apply) (NO CHANGE)	■ Steam Generation	Exhaust Gas Recovery	Other (specify):	y mar arabah Ayumbulgar can masarar / arabah salah da baraha 1 man asar masayan dalah da baraha kan salah da baraha baraha da
Cycle Type (NO CHANGE)	○ Simple Cycle	Regenerative Cycle     Other (specify):	and the state of t	
Combustion Type (NO CHANGE)	O Tubular		○ Annular	
Fuel (Turbine) (NO CHANGE)	C Landfill Gas* (	Digester Ga Propane Refinery Ga as, Refinery Gas, and/or Other are checken	s*	
Heat Recovery Steam Generator (HRSG) (NO CHANGE)	High Pressure Steam Out	nut Capacity:lb/hr @  but Capacity:lb/hr @  t Capacity:lb/hr @	0F	
	Manufacturer: John Zink			Model:
Duct Burner	Number of burners:	Rating of each burner (HHV):		
(NO CHANGE)	C Low NOx (	olease attach manufacturer's specificat	ions)	
	Type: Other: Show all I	eat transfer surface locations with the HR	SG and temperature profile	<del></del>
Fuel (Duct Bumer) (NO CHANGE)	Natural Gas     Refinery Gas*	LPG Digester Ga Landfill Gas* Propane  definery Gas, and/or Other are checked, attach f	s*	value and sulfur content).

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	V							
	Selective Catalytic	Reduction (SCR	)*	O Select	ive Non-ca	ntalytic Reducti	on (SNCR)*	· · · · · · · · · · · · · · · · · · ·
	Oxidation Catalyst	ť		Other	(specify)*		er och speriood de screen er om enne er en enne one	
Air Pollution Control	Steam/Water Injection Figure 1		lbs. water/lbs.	fuel. or		_ mole water/mo	le fuel	
(NO CHANGE)	* Separate application is					_ maio watanina	13 13 01	
	Capital Cost:		Installation C	ost:			Annual Ope	rating Cost:
REPER STATE OF THE	Manufacturer:				Model:			
	Catalyst Dimensions:	Length:	ft.	in. W	/idth:	ft.	in. Helg	ht:irir
	Catalyst Cell Density:	cell	s/sq. in.		Pressu	re Drop Across	Catalyst:	
Oxidation Catalyst Data (If Applicable)			Control Efficier	ıcy:	%	Catalys	t Life:	yrs.
(NO CHANGE)	Manufacturer's Guaran		Control Effici	ency:	%	Operati	ng Temp. Rang	ge:ºF
	Space Velocity (gas flo rate/catalyst volume):	W		Area Ve surface		flow/wetted ca	talyst	The state of the s
	VOC Concentration int	o Catalyst:	PPMVD @	15 % O <sub>2</sub>	CO Cond	entration into (	atalyst:	PPMVD @ 15 % O <sub>2</sub>
Eschald References and Company to the				a l			p. pysau Singaltes, 10 oka	
SECTION B: OPERATION	N INFORMATION	Artigoffrey distrib Doğumlar (Armiy di				eder School v Andreas	157 Kuğusa 151 Kuğusa	
	Pollutants	Maximun PPM@15% O	n Emissions Be	A COMPANIE NA SERVICE	graph and seed to			ns After Control
	ROG	<u></u>		lb/Hou	Sawo di Si		%O <sub>2</sub> , dry	lb/Hour
	NOx		**************************************	Paragram (An Jenesen or Jenesen State (An Jenesey State (An Jenese	***************************************		core restrictions of the string publishing and province a territorion.	W-F-S-SE-V-V-SE-M-M-S-SE-SE-V-SE-SE-V-SE-V-
	CO		d warmings, she seminiment. At white July 2000,	*********		***************************************	CONTROL SECTION CONTROL SECTIO	
On-line Emissions Data	PM10		AME OF COMM.	**************************************				AP ////////////////////////////////////
(NO CHANGE)	SOx	Accession of Property States A States (March 1994)	A MAN THE PARTY AND A PROPERTY OF THE PARTY					framework in the control of the cont
	NH3							
	Reference (attach data	):	* Based	on tempera	ature, fuel o	consumption, an	d MW output	
	Manufacturer Emi	•	EPA Emissi	on Factors	. [	AQMD Emis	sion Factors	Source Test
	Stack Height:	ftin.	s	tack Diamo	eter:	ft	_in.	
Stack or Vent Data (NO CHANGE)	Exhaust Temperature:	0F	E	khaust Pre	ssure:	inch	es water colum	n
NO CHANGE/	Exhaust Flow Rate:	CFM	(	DxygerLeve	el:	%		
Operating Schedule	Normal:	24 hours/day	F TO THE STREET, THE STREET, AS THE STREET,	7 days	lweek	52	weeks <i>l</i> yr	
(NO CHANGE)	Maximum:	24 hourelds	ne.	7	hunak	52	wookahu	

Startup Data (NO CHANGE)	No. of Startups per day: No. of Startups per year: Duration of each startup: hours									
Shutdown Data (NO CHANGE)	No. of Shutdowns per day:	No. of Shutdowns per day: No. of Shutdowns per year: Duration of each shutdown: hours								
	Pollutants	Startup E	missions	Shutdown Emis	Shutdown Emissions					
	Fondiants	PPM@15%O <sub>2</sub> , dry	lb/Hour	PPM@15% O <sub>2</sub> , dry	lb/Hour					
	ROG									
	NOx	**************************************	2771	Waterbald de Lembard for an object of control of the control of th	CMMarra Validora variante per proprie por processora de la companya del companya de la companya de la companya del companya de la companya del la companya del la companya de la companya					
Startup and Shutdown	co				ACCORDANCE - 100 -					
(NO: CHANGE)	PM10									
	SOx		***************************************							
	NH3									
	CEMS Make:Continuous Emission Monitoring System (CEMS)									
	CEMS Model:									
	Will the CEMS be used to measure both on-line and startup/shutdown emissions? Yes O No									
Monitoring and Reporting	The following parameters will be continuously monitored:									
(NO CHANGE)	⊠ NOx ⊠	00	⊠ o <sub>2</sub>							
	☑ Fuel Flow Rate ☑ Ammonia Injection Rate ☐ Other (specify)									
	Ammonia Stack Concentration: Ammonia CEMS Model									
		Ammonia (	CEMS Make		PORT THE ACCUSE CONTROL AND APPRICADE AND A					
MACAZIONIA SUBBNIA MI										
SECTION C: APPLICANT CERTIFICATION STATEMENT  I hereby certify that all information contained herein and information submitted with this application is true and correct.										
SIGNATURE OF PREPARER:	SIGNATURE OF PREPARER: PREPARER: PREPARER'S TELEPHONE NUMBER: (805) 764-6003									
Mule (1)	L LEnvironm	ental Engr.	400 Marie 1900 Marie 1							
CONTACT PERSON FOR INFO	RMATION ON THIS EQUIPME		CONTACT PERSON'S DATE SIGNED:							
John Shao			E NUMBER: (310) 84		2010					
E-MAIL ADDRESS: john.shao@bp.com			er: <u>(310)</u> 84	7-5780	$\omega$					

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CONFIDENTIAL INFORMATION

Under the California Public Records Act; all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain items as confidential, please complete the following steps:

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Page 3 of

Mail Application To: P.O. Box 4944 Diamond Bar, CA 91765

> Tel: (909) 396-3385 www.aqmd.gov

### **Application For Permit To Construct and Permit To Operate**

Section A: Operator Information											
Business Name of Operator To Appear On T      BD West Const Broducts LLC - DB					·						
BP West Coast Products LLC – BP  2. Valid AQMD Facility ID (Available on Permit	ACTIONS OF THE STATE CONTRACTOR OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE		ma (anh. 16 dìffean	Manager Commission	The time to the training of the contraction of the	MAIN NEW ARROSCO (FEE) CONTROL OF MAIN CONTRACTOR AND THE ARROSCO.					
issued by AQMD): 131003			Name (only If different from Business Name of Operator): ration Company								
\$2000000000000000000000000000000000000	(V. A. C.	valson Cogenera	A CONTRACTOR OF THE PARTY OF TH	en e	Fetting Miles and an interest programme to the programme of the contract of th	and all comments of the commen					
Section B: Equipment Location  4. Equipment Location Address:		- 14463311		Permit Mailing Address							
For equipment operated at various locations in At	QMD's jurisdiction, pre	ovide address of initial site	Permit and Correspondence Information:     Check here if same as equipment location address								
					L03						
2350 E. 223rd Street Street Address	rin na ramana kalangan da	71 1777797557000000000000000000000000000000	P.O. Box 6210								
Connection	000	40	Street Address								
Carson	CA, 908 State Zip Code	10 _	Carson CA 90749 6210								
out,	diate zip code		City	State	Zip Code						
County:   Los Angeles  Orange  Sar	n Bernardino 🔘 🗎	Riverside									
Contact Name: John Shao	TT WHELE TWO CAPTACTES TO BE TO SHORE A CAPTACT IN THE TOTAL TO SHORE A CAPTACT IN THE TOTAL TO SHORE A CAPTACT IN THE TOTAL THE TOTAL TO SHORE A CAPTACT IN T	er er er sende 1000 statt (som til som	Contact Name:	John Shao	ranor V 14 m (1444 1964 1964 ) (1441 1964 1964 1964 1964 1964 1964 1964	Cyn Yll (2002) yn 200ydd Officiae dd Gwellaid e gwell y gange					
Contact Title: Environmental Project En	igr. Phone: (	310) 847-5652	Contact Title: El	nvironmental Project Engr	. Phone: (310	) 847-5652					
Fax: (310) 847-5780 E-Mail: joh	n.shao@bp.c	om	Fax: (310) 8	47-5780 E-Mail:	john.shao@b	p.com					
Section D: Application Type   The fa	acility is in O	RECLAIM O Tit	INV @ DEC	AIRE O THIS IV December (	.l						
6. Reason for Submitting Application (Select or		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7. Esti	mated Start Date of Operation/Con-	struction (MM/DD/Y)	(YY):					
New Construction (Permit to	Permitted Equipmer	t Altered/ Modified Witho	ut 8. Des	cription of Equipment:		02/01/2010					
Construct)	Construct) Permit Approval*				Process 17, System 4 (Cogeneration Unit No. 4)						
C Equipment Operating Without A Permit or Expired Permit*	Proposed Alteration/ Equipment	Modification to Permitted									
C Administrative Change	Change of Condition	For Permit To Operate				:					
Equipment On-Site But Not Constructed or Operational	Change of Condition	For Permit To Construct	0. 15 (1)	is equipment portable AND will it be rent locations within AQMD's juris		No      Yes					
Title V Application (Initial, Revisions, etc.)	Change of Location-	-Moving to New Site	10. For	Identical equipment, how many add	ditional applications	are being					
		mit/Application Number: s in this column, you MUST		mitted with this application? (Form	<u> </u>	N-MOVEMBER SEEDING CO. Co					
Facility Permit Amendment provid	le a existing Permit/ Appl	ication Number)	(10 e	Are you a Small Business as per AQMD's Rule 102 definition? 10 employees or less and total gross receipts are \$500,000 or less,  No  Yes							
C Registration/Certification 41	1171	004 000 000 000 000 000 EE CO 000 000 000 000 000 000 000 0000 0	orai	not-for-profit training center?)		O NO C 165					
	·····		12. Has a Notice of Violation (NOV) or a Notice To Comply (NC) been issued for this equipment?								
<ul> <li>Streamlined Standard Permit</li> <li>*A Higher Permit Processing Fee applies to those ite</li> </ul>	me with an actorial-	(Rulo 301 (a) (1) (D)	● No ○ Yes If yes, provide NOV/NC#:								
Section E: Facility Business Informat		(Ivuic 301 (c) (1) (D)									
13. What type of business is being conducted at		ation?	14. What is you	ur businesses primary NAICS Code							
Petroleum Refining		A F 2000 Sult As ANN A A A A A A A A A A A A A A A A	(North Amer	ican Industrial Classification System)?	THE STATE OF STATE OF STATE IS A THE STATE OF ST	324110					
.15. Are there other facilities in the SCAQMD juris by the same operator?	diction operated	○ No <b>⊙</b> Yes		ny schools (K-12) within a 1000-ft. physical location?	radius of the	● No ○ Yes					
Section F: Authorization/Signature   he			and information subm	itted with this application is true and con	rect.						
17. Signature of Responsible Official:		l8. Title:		<u> </u>	Check List						
Alle Miller		Environmental Ma	anager	Form(s) signed and dat  Supplemental Equipme							
19. Print Name:		20. Date:		CEQA Form (400-CEQ		1 HOUTE GERY)					
	-	, )		Payment for permit pro	•						
Alan Seese	and conversed and market distributed also made to valor.	02/19/10		Your application will be reject	ted if any of the above i	tems are missing.					
AQMD APPLICATION/TRACKING # USE ONLY	TYPE B C D	EQUIPMENT CATEGO	PRY CODE:		VALIDATION						
ENG. A R ENG. A R	CLASS	ASSIGNMENT	СН	ECK/MONEY ORDER   AMOUNT	Tracking #						

Engineer

DATE



Mail Application To: SCAQMD P.O. Box 4944 Diamond Bar, CA 91765

Tel: (909) 396-3385

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A, Form CEOA	A, Piot Plan and Stack For	www.aqmd.gov
Permit to be issued to (Business name of operator to appear on permit):		
BP West Coast Products LLC - BP Carson Refinery	httistikkin olokisi ethilmismi maran sapapun 2-1997 populaja agalapapapapapapa	
Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's ju	urisdiction, please list the	initial location site):
2350 E. 223rd Street, Carson, CA 90810	<ul><li>Fixed Location</li></ul>	O Various Locations

SECTION A: EQUIPMEN	IT INFORMATION							
The second secon	Manufacturer: General Electric							
	Model No.: PG7111EA		Serial No.:					
Turbine	Size (based on Higher He	ating Value - HHV):						
(NO CHANGE)	Manufacturer Maxim	um Input Rating: MM	BTU/hrkWh					
	Manufacturer Maximum Output Rating: MMBTU/hrkWh							
Function	★ Electrical Generation	Driving Pump/Compressor	Emergency Peaking	ng Unit				
(Check all that apply) (NO_CHANGE)	★ Steam Generation	☐ Exhaust Gas Recovery	Other (specify):					
Cycle Type (NO CHANGE)	Simple Cycle Combined Cycle	Regenerative Cycle     Other (specify):						
Combustion Type (NO CHANGE)	○ Tubular		C Annular					
Fuel (Turbine) (NO CHANGE)	C Landfill Gas*	C LPG C Digester Propane Refinery Gas, Refinery Gas, and/or Other are che	Gas*					
Heat Recovery Steam Generator (HRSG) (NO CHANGE)	High Pressure Steam Out	MW  put Capacity: lb/hr @  put Capacity: lb/hr @  ut Capacity: lb/hr @	<b>0</b> F					
	Manufacturer: John Zink			Model:				
	Number of burners:	Rating of each burner (HHV):	The behavior of the control of the c	and the comment of the second				
Duct Burner	***************************************	A 1994 I Billion hall had be a see or reconstruction of the second of th						
(NO CHANGE)	Low NOx (please attach manufacturer's specifications)  Type: Other: Show all heat transfer surface locations with the HRSG and temperature profile							
	_							
Fuel (Duct Burner) (NO CHANGE)	Refinery Gas*	☐ LPG ☐ Digester ☐ Landfill Gas* ☐ Propane Refinery Gas, and/or Other are checked, attac	C Other*:					

### **GAS TURBINE**

	Selective Catalytic	Reduction (SCR	)*	Selective Non-catalytic Reduction (SNCR)*					
established services (1997)	<ul> <li>Oxidation Catalyst*</li> </ul>	•		Other	(specify)*		-		
Air Pollution Control	Steam/Water Injection: Injection Rate:ibs. water/ibs. fuel, or mole water/mole fuel  Steam/Water Injection:								
(NO CHANGE)	Injection Rate:ibs. water/ibs. fuel, or mole water/mole fuel * Separate application is required.								
	Capital Cost:		Installation C	ost:			Annual Oper	rating Cost:	
	Manufacturer:				Model:				
	Catalyst Dimensions:	Length:	ft.	_in.	Vidth:	ft.	in. Heigl	ht: ft. in	
	Catalyst Cell Density: cells/sq. in. Pressure Drop Across Catalyst:								
Oxidation Catalyst Data (If Applicable)	CO Control Efficiency:% Catalyst Life:yrs.								
(NO CHANGE)	VOC Control Efficiency: % Operating Temp. Range: %F								
ring dang begang pelakana Paggarang dan saka sahal saka Pelakanan sahap	Space Velocity (gas flow rate/catalyst volume):	<b>V</b>		Area Ve surface		s flow/wetted ca	talyst	ng advanté descriver au autour na	
	VOC Concentration into Catalyst: PPMVD @ 15 % O2 CO Concentration into Catalyst: PPMVD @ 15 % O2								
ad a 1 a 7 d 1 a 7 d 2 a 7 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d 2 d				iliouzigangan.	da kirio jilisis				
SECTION B: OPERATION	N INFORMATION		oriente de la compaño Antoca da compaño	19 (1) 4: ( 1: (1) 4: (			gazildizez uzvising		
	Pollutants	Maximun PPM@15%O	n Emissions Be <sub>2</sub> , dry	fore Contr lb/Hou	St. 231 (2)	And the second section of the sectio	imum Emissio %0 <sub>2</sub> dry	ns After Control lb/Hour	
	ROG			oral rabase bases	***************************************				
	NOx							TOTAL	
On-line	CO								
Emissions Data	PM10	***************************************	by dissalts block distalt by balls			1-10 W/n 4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1			
(NO CHANGE)	SOx	W						VVC64W = 1.4	
	NH3		***************				PMA, SPORES, SPANSON ASSOCIA	According to the contract of t	
	Reference (attach data):	•	* Based	on tempera	ature, fuel o	consumption, an	d MW output	*	
	Manufacturer Emis	sion Data [	☐ EPA Emiss	on Factors	; <u>[</u>	AQMD Emis	sion Factors	Source Test	
	Stack Height:	ftin.	:	tack Diam	eter:	ft	in.		
Stack or Vent Data	Exhaust Temperature:	<b>0F</b>	E	xhaust Pre	essure:	inch	es water colum	n	
(NO CHANGE)	Exhaust Flow Rate:	CFM		OxygerLev	el:	%			
Operating Schedule	Normal:	24 hours/day		7 days	/week	52	weeks/yr		
(NO CHANGE)	Maximum:	24 hours/da	v	7 davs	/week	52	weeks/yr		

### **GAS TURBINE**

Startup Data (NO+CHANGE)	No. of Startups per day: No. of Startups per year: Duration of each startup: hours									
Shuidown Data (NO CHANGE)	No. of Shutdowns per d	lay: No. of Sh	utdowns per year:	Duration of each shutdown:	hours					
	Dollistooto	Startu	p Emissions	Shutdown Emissions						
	Pollutants	PPM@15% O <sub>2</sub> , dry ib/Hou		PPM@15% O <sub>2</sub> , dry	lb/Hour					
	ROG									
a dan engang penggulah dan salah a dan atau penggulah dan	NOx			***************************************						
Startup and Shutdown Emissions Data	co									
(NO CHANGE)	PM10									
	SOx	Adv. M. Namelee de 18th Advisor annich deue vermalieren anne en vervele anne arranne anne								
	NH3	7,000								
	CEMS Make:Continuous Emission Monitoring System (CEMS)  CEMS Model:									
The state of the s	Will the CEMS be used to measure both on-line and startup/shutdown emissions? Yes O No									
Monitoring and Reporting	The following parameters will be continuously monitored:									
(NO CHANGE)	⊠ NOx ⊠ CO ⊠ O <sub>2</sub>									
	▼ Fuel Flow Rate									
	Ammonia Stack Concentration: Ammonia CEMS Model									
		Ammo	nia CEMS Make							
CECTION C ARRESTANT	- OEDTIEIOATION C		Alamo, enla alama santina							
SECTION C: APPLICANT I hereby certify that all information		AICNICIYI		d.						
SIGNATURE OF PREPARER:		OF PREPARER:		HONE NUMBER: (805) 764-60						
Make La	) ( // A Envir	onmental Engr.	PREPARER'S E-MAIL	ADDRESS: mwaller@algcorp	.com					
CONTACT PERSON FOR INFO	RMATION ON THIS EQUI		CT PERSON'S	DATE SIGNE						
John Shao			HONE NUMBER: (310) 8		12010					
E-MAIL ADDRESS: john.sha	io@bp.com	FAX N	JMBER: (310) 8	47-5780 <i>L</i> 10	1000					

CONFIDENTIAL INFORMATION

Under the California Public Records Act, all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain items as confidential, please complete the following steps:

(a) Make a copy of any page containing confidential information blanked out. Label this page "public copy."

(b) Label the original page "confidential." Circle all confidential items on the page.

(c) Prepare a written justification for the confidentiality of each confidential item. Append this to the confidential copy.

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## GENERAL INFORMATION BP WEST COAST PRODUCTS LLC BP CARSON REFINERY

# PERMIT APPLICATION TO REPLACE CONDITIONS REFERRING TO "COMMON TO COGENERATION UNITS 1,2,3,& 4" WITH "COMMON TO ALL COGENERATION UNITS" AND ADD A COMMON PM-10 EMISSIONS LIMIT (PROCESS 17, SYSTEMS 1-4)

This application is submitted in accordance with the applicable rules and regulations of the South Coast Air Quality Management District (SCAQMD).

### **GENERAL INFORMATION SUMMARY -FORM 400-E-GI**

### 1. Equipment/Process Location Drawing

Section 3 of this permit application identifies site and property boundaries and adjacent streets. Notably, there are no schools within 1,000 feet of the equipment affected by this project.

### 2 Process/Project Description

A specific description of the process equipment and the modification is provided in Section 2 to this application.

### 3. Operating Schedule

A discussion of the operating schedule is provided in Section 4 to this application.

### 4. Equipment Description

A discussion of the equipment is provided in Section 5 to this application.

### 5. Process Rate

Not applicable. There will be no changes to the feed/throughput rates for any of the equipment affected by this project.

### 6. Fuels and Burners Used

Not applicable. There will be no changes to fuels or burner systems used for any of the equipment affected by this project.

### 7. Flow Diagram

Not applicable. There will be no changes to process flows as a result of this project.

### 8. <u>Drawings Of Equipment/Process</u>

Not applicable. There will be no changes to equipment drawings as a result of this project.

### 9. <u>Drawings Of The Exhaust System</u>

Not applicable. There will be no changes to the exhaust system as a result of this project.

### 10. Stack/Exhaust Emissions Data

BP does not propose to change existing stack/emissions data as part of this project. However, BP does propose the addition of a combined PM-10 emissions limit common to cogenerations units 1-4 and proposed cogeneration unit 5.

### 11. Air Quality Impact

A discussion of Air Quality Analysis (AQA) and Health Risk Assessment (HRA) is provided in Section 9.

### SECTION 1 COMPANY INFORMATION

### 1.1 Company Name

**BP West Coast Products LLC** 

### 1.2 Responsible Official

Alan Seese, Environmental Manager – BP Carson Refinery 310-847-5658

### 1.3 Contact Person

John Shao, Environmental Project Engineer – BP Carson Refinery 310-847-5652

### 1.4 Physical Address

BP Carson Refinery 2350 E. 223rd Street Carson, California 90810

### 1.5 Mailing Address

BP Carson Refinery Carson One Campus P.O. Box 6210 Carson, California 90749-6210

### SECTION 2 PROCESS/PROJECT DESCRIPTION

The Watson Cogeneration Plant is a combined cycle cogeneration facility that currently uses four GE Frame-7 Gas Turbine Generators to generate electric power and four associated Heat Recovery Steam Generators to produce nominal 600 psig steam. This plant provides steam and electricity to the Refinery and electricity to the Southern California Edison electrical grid.

The purpose of this application is to replace all equipment descriptions/permit conditions referencing "common to cogeneration units 1,2,3,& 4" (Process 17, Systems 1-4) with "common to all cogenerations units" as well as adding a PM-10 emissions limit applicable to the combined emissions of the four existing units and the proposed new cogeneration unit (unit 5).

# SECTION 3 FACILITY LOCATION

The BP West Coast Products LLC -BP Carson Refinery (BP) is located in the City of Carson in the southern portion of Los Angeles County. The property boundaries for BP Carson Refinery are shown in Figure 3-1 and Figure 3-2.

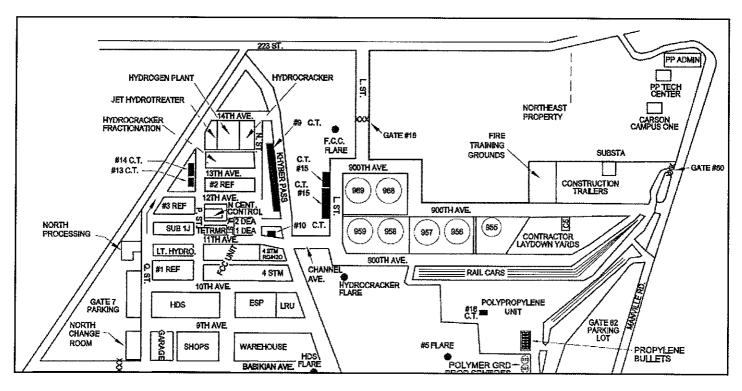
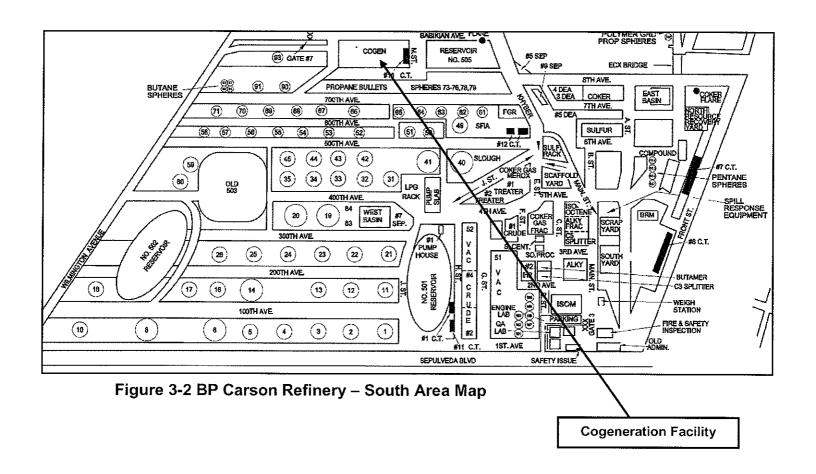


Figure 3-1 BP Carson Refinery - North Area Map



# SECTION 4 OPERATING SCHEDULE

This application does not propose any changes to the operating schedule of this equipment. During normal conditions, the Cogeneration Facility operates 24 hours per day, 7 days per week and 52 weeks per year.

# SECTION 5 EQUIPMENT DESCRIPTION

BP proposes the following changes in equipment description:

Device ID	Current Description	Proposed Description
D1228	STEAM TURBINE, STEAM, DRIVING 42.78 MVA ELECTRIC GENERATOR, RATED@37.5 MW, (COMMON TO COGENERATION UNITS NO. 1, 2, 3 & 4)	STEAM TURBINE, STEAM, DRIVING 42.78 MVA ELECTRIC GENERATOR, RATED@37.5 MW, (COMMON TO THE COGENERATION SYSTEM)
D1229	STEAM TURBINE, STEAM, DRIVING 42.78 MVA ELECTRIC GENERATOR RATED @ 37.5 MW, (COMMON TO COGENERATION UNITS NO. 1, 2, 3 & 4)	STEAM TURBINE, STEAM, DRIVING 42.78 MVA ELECTRIC GENERATOR RATED @ 37.5 MW, (COMMON TO THE COGENERATION SYSTEM)
D1231	CONDENSER, STEAM SURFACE, (COMMON TO COGENERATION UNITS NO. 1, 2, 3 & 4)	CONDENSER, STEAM SURFACE, (COMMON TO THE COGENERATION SYSTEM)
D1232	CONDENSER, STEAM SURFACE, (COMMON TO COGENERATION UNITS NO. 1, 2, 3 & 4)	CONDENSER, STEAM SURFACE, (COMMON TO THE COGENERATION SYSTEM)
D2111	HEAT EXCHANGER, BUTANE D2111 VAPORIZER, RPV4830, (COMMON TO COGENERATION UNITS NO. 1, 2, 3, & 4)	HEAT EXCHANGER, BUTANE D2111 VAPORIZER, RPV4830, (COMMON TO THE COGENERATION SYSTEM)
D2112	DRUM, KNOCK OUT, BUTANE, RPV 4831, (COMMON TO COGENERATION UNITS NO. 1, 2, 3 & 4), HEIGHT: 11 FT; DIAMETER: 5 FT 6 IN	DRUM, KNOCK OUT, BUTANE, RPV 4831, (COMMON TO THE COGENERATION SYSTEM), HEIGHT: 11 FT; DIAMETER: 5 FT 6 IN
D2113	HEAT EXCHANGER, BUTANE D2113 SUPERHEATER, RPV4832, (COMMON TO COGENERATION UNITS NO. 1, 2, 3, 8, 4)	HEAT EXCHANGER, BUTANE D2113 SUPERHEATER, RPV4832, (COMMON TO THE COGENERATION SYSTEM)
D2740	COMPRESSOR, NO. 1, RW-0045-087.32, 10,700 SCFM (COMMON TO COGENERATION UNITS NO. 1, 2, 3 & 4)	COMPRESSOR, NO. 1, RW-0045-087.32, 10,700 SCFM (COMMON TO THE COGENERATION SYSTEM)
D2775	COMPRESSOR, NO. 2, RW-0046-087.32, D2775 10,700 SCFM (COMMON TO COGENERATION UNITS NO. 1, 2, 3 & 4)	COMPRESSOR, NO. 2, RW-0046-087.32, D2775 10,700 SCFM (COMMON TO THE COGENERATION SYSTEM)
D2741	DRUM, RPV-4800, SLOP COLLECTING (COMMON TO COGENERATION UNITS NO. 1, 2, 3 & 4), HEIGHT: 9 FT; DIAMETER: 4 FT	DRUM, RPV-4800, SLOP COLLECTING (COMMON TO THE COGENERATION SYSTEM), HEIGHT: 9 FT; DIAMETER: 4 FT

## SECTION 6 EMISSION CALCULATIONS

# Change in Equipment Description/Permit Condition

The proposed change in equipment description/permit conditions will not affect emissions from Cogeneration Systems 1-4. No emissions calculations are necessary or provided with this permit application package.

## **PM-10 Emissions Limit**

BP proposes to apply a PM-10 emissions limit of 1,244 lbs/day, applicable to the combined emissions from existing Cogeneration Units 1-4 (Process 17, Systems 1-4) and the proposed new cogeneration unit (unit 5 under permit application numbers 496922, 496924 and 492925). Emissions calculations to support the proposed emissions limit have been provided as part of pending application numbers 496922, 496924 and 492925.

# SECTION 7 EVALUATION AND Rule REVIEW

# 7.1 Regulation II -Permits

# Rule 212: Standards for Approving Permits

All equipment associated with this project are expected to continue to operate without emitting air contaminants in violation of the State Health and Safety Code or in violation of SCAQMD's rules and regulations. These devices are not located within 1,000 feet of a school. The modification will not cause an increased cancer risk greater than, or equal to, one in a million (1x10<sup>-6</sup>) during a lifetime of 70 years, or pose a risk of nuisance.

Public notice under Rule 212(g) is not required for this permitting action.

# Rule 218: Stack Monitoring

The provisions of this rule only apply to continuous carbon monoxide (CO) monitoring. The facility is subject to Regulation XX RECLAIM provisions; therefore, the provisions of this rule are not applicable to NOx and SOx monitoring [see Rule 2001(j)(2)].

# 7.2 Regulation III - Application Fees

#### Rule 301: Fees

Permit application fee calculations are included as **Attachment A** to this application package. A check in the amount of \$27,355.19 has been attached to this application package. Fee rates are based on the June 5, 2009 revision of Rule 301. Please note that the RECLAIM/Title V Permit Amendment fee was already provided with pending applications 496922, 496924 and 496925.

# 7.3 Regulation IV - Prohibitions

#### Rule 401: Visible Emissions

The proposed changes in equipment description and permit conditions are not expected to affect compliance with the provisions of this rule. Continued compliance is anticipated.

#### Rule 402: Nuisance

The proposed changes in equipment description and permit conditions are not expected to affect compliance with the provisions of this rule. Continued compliance is anticipated.

# Rule 404: Particulate Matter - Concentration

Not applicable. The provisions of this rule do not apply to emissions resulting from the combustion of liquid or gaseous fuels in steam generators or gas turbines.

# Rule 407: Liquid and Gaseous Air Contaminants

CO Emissions: The proposed changes in equipment description and permit conditions are not expected to affect compliance with the 2,000 ppmv concentration limit imposed by this rule. Continued compliance is anticipated. SOx Emissions: The facility is subject to Regulation XX RECLAIM provisions; the provisions of this rule, as applicable to SOx emissions, are not applicable [see Rule 2001(j)(2)].

#### Rule 408: Circumvention

The proposed changes in equipment description and permit conditions are not expected to affect compliance with the provisions of this rule. Continued compliance is anticipated.

#### Rule 409: Combustion Contaminants

The proposed changes in equipment description and permit conditions are not expected to affect compliance with the 0.1 grain combustion contaminant per cubic foot of gas emissions limit imposed by this rule. Continued compliance with the provisions of this rule is anticipated.

## Rule 429: Start-up & Shutdown Exemption Provision for NOx

The facility is subject to Regulation XX RECLAIM provisions; the provisions of this rule are not applicable [see Rule 2001(j)(2)].

#### Rule 430: Breakdown Provisions

The facility is subject to Regulation XX RECLAIM provisions; the provisions of this rule are not applicable [see Rule 2001(j)(2)].

#### Rule 431.1: Sulfur Content of Gaseous Fuels

The facility is subject to Regulation XX RECLAIM provisions; the provisions of this rule are not applicable [see Rule 2001(i)(2)].

#### Rule 474: Fuel Burning Equipment – Oxides of Nitrogen

The facility is subject to Regulation XX RECLAIM provisions; the provisions of this rule are not applicable [see Rule 2001(i)(2)].

#### Rule 475: Electric Power Generating Equipment

The proposed changes in equipment description and permit conditions are not expected to affect compliance with the 0.01 grain combustion contaminant per cubic foot of gas emissions limit imposed by this rule. Continued compliance with the provisions of this rule is anticipated.

#### Rule 476: Steam Generating Equipment

*NOx Emissions*: The facility is subject to Regulation XX RECLAIM provisions; the provisions of this rule are not applicable [see Rule 2001(j)(2)].

Combustion Contaminants: The proposed changes in equipment description and permit conditions are not expected to affect compliance with

the 0.01 grain combustion contaminant per cubic foot of gas emissions limit imposed by this rule. Continued compliance with the provisions of this rule is anticipated.

# 7.4 Regulation IX – Standards of Performance for New Stationary Sources (NSPS)

## NSPS Subpart J: Standards of Performance for Petroleum Refineries

The gas turbines and duct burners are subject to the fuel gas H2S concentration limit of 160 ppmv. The proposed changes in equipment description and permit conditions are not expected to change the regulatory applicability or affect compliance with the provisions of this rule. Continued compliance is anticipated.

NSPS Subpart Ja: Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007.

The gas turbines and duct burners in cogeneration units 1-4 are not currently subject to NSPS Subpart Ja standards. The proposed changes in equipment description and permit conditions relating to cogeneration units 1-4 will not cause an emissions increase, affect throughput or require a capital expenditure exceeding NSPS Ja modification or reconstruction thresholds.

NSPS Subpart D: Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971

A fossil-fuel-fired steam generating unit is defined as a "furnace or boiler used in the process of burning fossil fuel for the purpose of producing steam by heat transfer." BP cogeneration system units 1-4 do not consist of furnaces or boilers and therefore are not subject to the provisions of this regulation.

# NSPS Da: Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978

Electric utility steam-generating unit is defined as "any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW net-electrical output to any utility power distribution system for sale." The cogeneration system was not constructed for the purpose of supplying more than one-third of its potential electrical output and more than 25 MW net-electrical output to any utility distribution system for sale; therefore, the provisions of this regulation do not apply.

# NSPS Db: Standards of Performance for Industrial-Commercial Institutional Steam Generating Units

The provisions of this regulation apply to steam generating units with a heat input capacity greater than 29 megawatts (10 million British thermal units per hour) which are constructed, modified or reconstructed after June 19, 1984.

The heat recovery steam generators associated with cogeneration units 1-4 are subject to the 0.2 lbs NOx per million British thermal unit heat input emissions limit of this regulation. The PM and SOx emissions limitations do not apply due to the exclusive burning of natural gas, fuel gas and/or butane. The proposed changes in equipment description and permit conditions are not expected to change the regulatory applicability or affect compliance with the provisions of this rule. Continued compliance is anticipated.

# NSPS Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

The provisions of this regulation apply to small industrial-commercial-institutional steam generating units with a maximum design heat input capacity of 29 megawatts (100 million British thermal units per hour) or less, but greater than or equal to 2.9 megawatts (10 MMBtu/hr). BP cogeneration units 1-4 exceed the maximum heat input threshold; therefore, the provisions of this regulation do not apply.

# NSPS Subpart GG: Standard of Performance for Stationary Gas Turbines

The provisions of this regulation apply to stationary gas turbines with a peak load heat input rating greater than 10 million British thermal units per hour which are constructed, modified or reconstructed after October 3, 1977. The gas turbines associated with cogeneration units 1-4 are subject to the provisions of this regulation and are subject to both the NOx and SOx effluent concentration limits of this regulation. The proposed changes in equipment description and permit conditions are not expected to change the regulatory applicability or affect compliance with the provisions of this rule. Continued compliance is anticipated.

# NSPS Subpart KKKK: Standard of Performance for Stationary Combustion Turbines

The provisions of this regulation apply to stationary combustion turbines with heat input ratings greater than 10 million British thermal units per hour which are constructed, modified or reconstructed after February 18, 2005. Since Cogeneration units 1-4 were installed prior to February 18, 2005, the provisions of this regulation do not apply. The proposed changes in equipment description and permit conditions relating to these units will not cause an emissions increase, affect throughput or require a capital expenditure exceeding NSPS KKKK modification or reconstruction thresholds.

# 7.5 <u>Regulation X – National Emission Standards for Hazardous Air</u> Pollutants (NESHAPS)

MACT Subpart YYYY: National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

The provisions of this regulation apply to stationary combustion turbines at major sources of HAP emissions. Although not listed in Section K of the permit, Subpart YYYY applies to cogeneration units 1-4. Cogeneration units 1-4 are considered "existing" units and do not have to meet the requirements of this subpart or Subpart A [see 40 CFR 63.6090(b)(4)]. The proposed changes in equipment description and permit conditions relating to these units will not trigger the "reconstruction" capital expenditure threshold of 50% for the construction of a comparable new unit [see 63.6090(a)(3)]; therefore, no new requirements will apply as a result of this permitting project.

# 7.6 Regulation XI – Source Specific Standards

Rule 1134: Emissions of Oxides of Nitrogen from Stationary Gas Turbines
The facility is subject to Regulation XX RECLAIM provisions; the provisions of this rule are not applicable [see Rule 2001(j)(2)].

# Rule 1135: Emissions of Oxides of Nitrogen from Electric Power Generating Systems

The facility is subject to Regulation XX RECLAIM provisions; the provisions of this rule are not applicable [see Rule 2001(j)(2)].

# Rule 1146: Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters

The duct burners associated with cogeneration units 1-4 are excluded from the definition of "boiler or steam generator" and therefore are not subject to the provisions of this rule [Rule 1146(b)(4)].

# 7.7 Regulation XIII - New Source Review

# Best Available Control Technology (VOC, CO, PM)

As noted in Section 6, the proposed changes will not cause an emission increase; therefore, BACT is not triggered by this permitting action.

# Offsets (VOC, CO, PM)

As noted in Section 6, the proposed changes will not cause an emission increase to cogeneration units 1-4; therefore, offset requirements are not triggered by this permitting action.

# Air Quality Modeling (VOC, CO, PM)

As noted in Section 6, the proposed changes will not cause an emission increase; therefore, air quality modeling is not required.

# 7.8 Regulation XIV – Toxics and Other Non-Criteria Pollutants

Rule 1401: New Source of Toxic Air Contaminants

As noted in Section 6, the proposed changes will not cause an emission increase; therefore, evaluation under Rule 1401 is not required.

Rule 1402: Control of Toxic Air Contaminants From Existing Sources
There will be no increase in toxic air contaminants from existing sources as a result of the proposed modification.

# 7.9 Regulation XVII – Preventions of Significant Deterioration (PSD)

The proposed changes to cogeneration units 1-4 will not cause an actual or potential increase in the issuance of attainment air contaminants; therefore, PSD provisions are not triggered by this permitting action.

# 7.10 Regulation XX - Regional Clean Air Incentives Market (RECLAIM)

# Best Available Control Technology (NOx, SOx)

As noted in Section 6, the proposed changes will not cause an emission increase; therefore, BACT is not triggered by this permitting action.

# RECLAIM Trading Credits (RTC) (NOx, SOx)

As noted in Section 6, the proposed changes will not cause an emission increase; therefore, no additional RTC's are required as a result of this permitting action.

## Air Quality Modeling (NOx, SOx)

As noted in Section 6, the proposed changes will not cause an emission increase; therefore, air quality modeling is not required.

The proposed changes in equipment description and permit conditions are not expected to affect the facility's ability to comply with the provisions of this rule. Continued compliance is anticipated.

# 7.11 Regulation XXX – Title V Permits

Since this application is part of the Watson Cogeneration Steam and Reliability Project, it should be processed with together with the application for cogeneration unit number 5 as a Title V Significant Permit Revision due to:

- 1. The proposed installation of cogeneration unit number 5 will attempt to "[establish] or [change] a permit condition that the facility assumes to avoid an applicable requirement" (PM-10 offsets) and
- 2. The proposed installation of cogeneration unit number 5 will be "new equipment subject to a New Source Performance Standard (NSPS) pursuant to 40 CFR Part 60, or a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to 40 CFR Part 61 or 40 CFR Part 63 [see Rule 3000(b)(28)].

# 7.12 40 CFR PART 40 - COMPLIANCE ASSURANCE MONITORING

Compliance Assurance Monitoring (CAM) provisions do not apply to cogeneration units 1-4 based on the following criteria:

- 1. ROG, SOx and PM: Uncontrolled emissions from several of these pollutants may exceed major source thresholds; however, these pollutants do not use a control device to meet these emissions limitations [see 40 CFR 64.2(a)(2)].
- 2. NOx and CO: Uncontrolled emissions of these pollutants exceed major source thresholds, are subject to an emissions limitation, and use a control device to meet these standards (SCR and a CO oxidation catalyst) [see 40 CFR 64.2(a)]; however, these pollutants are monitored using a Continuous Emissions Monitoring System (CEMS) and are exempt from the provisions of CAM [see 40 CFR 64.2(b)(vi)].

# SECTION 8 BEST AVAILABLE CONTROL TECHNOLOGY (BACT) ANALYSIS

As noted in Section 6, the proposed changes will not cause an emission increase; therefore, BACT is not triggered by this permitting action.

# SECTION 9 AIR QUALITY IMPACTS ANALYSIS AND HEALTH RISK ASSESSMENT

As noted in Section 6, the proposed changes will not cause an emission increase; therefore, an air quality impact and toxic risk analysis is not required as a result of this permitting action.

# SECTION 10 MODIFICATIONS TO PERMIT CONDITIONS

Please make modification(s) to the following permit condition(s):

# **GAS TURBINE CONDITIONS**

## **Permit Condition A63.12**

<u>Current</u>: The operator shall limit emissions from this equipment as follows:

ROG Less than or equal to 108 lbs/day

NOX Less than or equal to 2156 lbs/day

SOX Less than or equal to 59 lbs/day

CO Less than or equal to 82 lbs/day

PM Less than or equal to 186 lbs/day

The operator shall calculate the emissions, as the total emissions from the waste heat boiler exhaust of a cogeneration unit during the 24 hours of operation following firing.

[Rule 1303(b)(2)-Offset, 5-10-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239]

Proposed:

No change requested.

#### **Proposed New Condition A63.xx**

Proposed: The operator shall limit emissions from this equipment as follows:

PM-10 Less than or equal to 1,244 lbs per day

For purposes of this condition, this limit applies to the total combined emissions of the units to which this permit condition applies.

[Rule 1303(b)(2)-Offset, 12-6-2002, Rule 1304(c)(2), 6-14-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239, Dxxxx (Proposed Cogeneration Unit No. 5)]

Basis:

This proposed permit condition is requested in order to qualify for Rule 1304(c)(2) concurrent facility modification offset exemption by limiting aggregated PM-10 emissions from cogeneration units 1-5 to the maximum emissions evaluated for cogeneration units 1-4.

#### **Permit Condition A99.1**

Current:

The 8 PPM NOX emission limit(s) shall not apply when this equipment is operating during startup and shutdown modes.

[Rule 2005, 5-6-2005] [Devices subject to this condition: D1226, D1233, D1236, D1239]

Proposed: No change requested.

# **Permit Condition A99.2**

Current: The 2.5 PPM CO emission limit(s) shall not apply when the associated

gas turbine is operating at less than 85 percent of the rated capacity.

This condition refers to CO emission limit.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1233, D1236, D1239]

Proposed: No change requested.

# **Permit Condition A99.3**

<u>Current</u>: The 2.5 PPM CO emission limit(s) shall not apply when the equipment is

operating at startup and shutdown modes.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1233, D1236, D12391

Proposed: No change requested.

# **Permit Condition A248.1**

<u>Current</u>: The 8 PPM NOX emission limit is dry, corrected to 15 percent oxygen.

[Rule 2005, 5-6-2005] [Devices subject to this condition: D1226, D1233.

D1236, D1239]

Proposed: No change requested.

#### Permit Condition A248.2

Current: The 2 PPM SOX emission limit is dry, corrected to 15 percent oxygen.

[Rule 2005, 5-6-2005] [Devices subject to this condition: D1226, D1233,

D1236, D12391

Proposed: No change requested.

#### Permit Condition A248.3

<u>Current</u>: The 2.5 PPM CO emission limit is dry, corrected to 15 percent oxygen.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1233, D1236, D1239]

**BP West Coast Products LLC** 

January 2010

<u>Proposed</u>: No change requested.

# Permit Condition A248.4

<u>Current</u>: The 4.5 PPM CO emission limit is dry, corrected to 15 percent oxygen.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1233, D1236, D1239]

Proposed: No change requested.

# **Permit Condition A327.1**

Current: For the purpose of determining compliance with District Rule 475,

combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

[Rule 475, 10-8-1976; Rule 475, 8-7-1978] [Devices subject to this

condition: D1226, D1233, D1236, D1239]

Proposed: No change requested.

# **Permit Condition B61.1**

Current: The operator shall only use refinery gas containing the following

specified compounds:

Total Sulfur less than 100 ppmv.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

# **Permit Condition B61.2**

<u>Current</u>: The operator shall only use butane containing the following specified

compounds:

Total Sulfur less than 50 ppmv

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

# **Permit Condition B61.3**

Current: The operator shall only use natural gas containing the following specified

compounds:

**BP West Coast Products LLC** 

January 2010

Total Sulfur less than 5 ppmv

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition: D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

## Permit Condition B61.4

Current:

The operator shall not use fuel gas, except uncombined natural gas which is not regulated by the condition, containing the following specified compounds:

H2S greater than 160 ppmv

[40CFR 60 Subpart J, 6-24-2008] [Devices subject to this condition: D27, D29, D31, D33, D67, D69, D151, D153, D155, D250, D252, D416, D417, D418, D419, D421, D423, D425, D532, D535, D538, D539, D541, D570, D625, D626, D627, D628, D629, C910, D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240, D1262, C1326, D1439, D1465, C2413, D2837]

Proposed: No change requested.

# **Permit Condition C1.33**

Current:

The operator shall limit the duration of shutdown to no more than 4 hour(s). For the purpose of this condition, "duration of shutdown" shall be defined as the duration prior to extinguishing the flame in the gas turbine.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239]

<u>Proposed</u>: No change requested.

## **Permit Condition C1.34**

Current:

The operator shall limit the duration of startup to no more than 8 hour(s). For the purpose of this condition, "duration of startup" shall be defined as the duration beginning immediately following initial firing of the gas turbine.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239]

Proposed: No change requested.

## **Permit Condition D12.1**

Current:

The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the fuel usage at the gas turbine for each fuel being fired. The operator shall also install and maintain a device to continuously record the parameter being measured. The measuring device or gauge shall be accurate to within + or - 5.0 percent. It shall be calibrated once every 12 months.

[Rule 1303(b)(2)-Offset, 5-10-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239]

Proposed: No change requested.

# **Permit Condition D12.2**

Current:

The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the steam-to-fuel ratio at the gas turbine for each fuel fired. The operator shall also install and maintain a device to continuously record the parameter being measured. The measuring device or gauge shall be accurate to within + or - 5.0 percent. It shall be calibrated once every 12 months.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239]

Proposed: No change requested.

# Permit Condition D90.3

Current:

The operator shall periodically analyze the fuel gas for total sulfur content in the refinery gases and butane used in the cogeneration facility according to the following specifications:

The operator shall analyze once every week.

[Rule 2005, 5-6-2005; Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997] [Devices subject to this condition: D860, D866, D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

#### Permit Condition D90.4

Current:

The operator shall continuously monitor the H2S concentration in the fuel gases before being burned in this device according to the following specifications:

The operator shall use Gas Chromatograph meeting the requirements of 40CFR60 Subpart J to monitor the parameter. The operator shall also

install and maintain a device to continuously record the parameter being monitored. The operator may monitor the H2S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned in this device.

[40CFR 60 Subpart J, 6-24-2008] [Devices subject to this condition: D27, D29, D31, D33, D67, D69, D151, D153, D155, D250, D252, D313, D416, D417, D418, D419, D421, D423, D425, D532, D535, D538, D539, D541, D570, D625, D626, D627, D628, D629, C910, D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240, D1262, D1439, C2413, D2837]

Proposed: No change requested.

#### **Permit Condition D90.17**

Current:

The operator shall periodically monitor the H2S concentration at the inlet of this device according to the following specifications:

The Alternative Monitoring Plan (AMP) approved by the United States Environmental Protection Agency (USEPA) on July 11, 2003 for the periodic monitoring and reporting of H2S concentration for refinery gas stream to four WCC turbines In addition, the operator shall also comply with all other requirements of the AMP issued by the USEPA on July 11, 2003 for four WCC turbines.

[40CFR 60 Subpart A, 6-13-2007; 40CFR 60 Subpart J, 6-24-2008] [Devices subject to this condition: D1226, D1233, D1236, D1239]

<u>Proposed</u>: No change requested.

#### **Permit Condition D94.1**

Current:

The operator shall install, maintain and operate a sampling line from the sampling port and made accessible in the gas turbine exhaust duct and after the waste heat boiler in accordance with District guidelines.

[Rule 1303(a)(1)-BACT, 5-10-1996; Rule 1303(b)(2)-Offset, 5-10-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239]

Proposed: No change requested.

#### **Permit Condition E17.1**

<u>Current</u>: The operator shall not use more than 4 of the following items simultaneously:

Device ID: D1226 (Turbine, Cogeneration Unit No. 1)

Device ID: D1233 (Turbine, Cogeneration Unit No. 2)

Device ID: D1236 (Turbine, Cogeneration Unit No. 3)

Device ID: D1262 (No. 42 Boiler)

Device ID: D1239 (Turbine, Cogeneration Unit No. 4)

[Rule 1303(b)(2)-Offset, 5-10-1996] [Devices subject to this

condition: D1226, D1233, D1236, D1239]

<u>Proposed</u>: BP requests the removal of this permit condition since it is requesting the removal of the No. 42 Boiler (D1262).

# **Permit Condition E54.1**

Current:

The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: D2808 [DRUM, KNOCK OUT, VERTICAL, SFIA VAPOR RECOVERY WEST]

Requirement number 1: During periods of startup and shutdown modes.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

#### Permit Condition E73.1

Current:

Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use steam injection if any of the following requirement(s) are met:

Startup and shutdown modes of operation.

[Rule 2005, 5-6-2005] [Devices subject to this condition: D1226, D1233,

D1236, D1239]

Proposed: No change requested.

#### **Permit Condition E226.1**

**Current:** 

The following condition number(s) shall only apply if any of the requirement(s) stated below are met:

Condition number 17-1

Requirement 1: Boiler No. 42 is in operation

[Rule 1303(b)(2)-Offset, 5-10-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239]

<u>Proposed</u>: BP requests the removal of this permit condition since it is requesting the removal of the No. 42 Boiler (D1262).

## **Permit Condition H23.1**

Current:

This equipment is subject to the applicable requirements of the following rules or regulations:

H2S; 40CFR60, SUBPART J

[40CFR 60 Subpart J, 6-24-2008] [Devices subject to this condition: D27, D29, D31, D33, D67, D69, D151, D153, D155, D250, D252, D313, D416, D417, D418, D419, D421, D423, D425, D532, D535, D538, D539, D541, D570, D625, D626, D627, D628, D629, C910, D1227, D1233, D1234, D1236, D1237, D1239, D1240, D1262, C1326, D1439, D1465, C2413, D2837]

Proposed: No change requested.

## **Permit Condition H23.18**

Current:

This equipment is subject to the applicable requirements of the following rules or regulations:

NOX; 40CFR60, SUBPART GG

SOX; 40CFR60, SUBPART GG

H2S; 40CFR60, SUBPART J

[40CFR 60 Subpart GG, 2-24-2006; 40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: D1226, D1233, D1236, D1239]

Proposed: No change requested.

#### **Permit Condition K67.3**

Current:

The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Type and quantity of fuel usage, ammonia usage, actual and corrected outlet NOX emission concentration.

[Rule 1303(b)(2)-Offset, 5-10-1996] [Devices subject to this condition: D1226, D1233, D1236, D1239]

Proposed: No change requested.

**BP West Coast Products LLC** 

January 2010

## **DUCT BURNER CONDITIONS**

## Permit Condition A327.2

Current: For the purpose

For the purpose of determining compliance with District Rule 476, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

[Rule 476, 10-8-1976] [Devices subject to this condition: D1227, D1234,

D1237, D1240, D1262]

Proposed: No change requested.

# Permit Condition B61.1

<u>Current</u>: The operator shall only use refinery gas containing the following

specified compounds:

Total Sulfur less than 100 ppmv

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

# **Permit Condition B61.2**

Current: The operator shall only use butane containing the following specified

compounds:

Total Sulfur less than 50 ppmv

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

#### **Permit Condition B61.3**

<u>Current</u>: The operator shall only use natural gas containing the following specified

compounds:

Total Sulfur less than 5 ppmv

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

## **Permit Condition B61.4**

Current:

The operator shall not use fuel gas, except uncombined natural gas which is not regulated by the condition, containing the following specified compounds:

H2S greater than 160 ppmv

[40CFR 60 Subpart J, 6-24-2008] [Devices subject to this condition: D27, D29, D31, D33, D67, D69, D151, D153, D155, D250, D252, D416, D417, D418, D419, D421, D423, D425, D532, D535, D538, D539, D541, D570, D625, D626, D627, D628, D629, C910, D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240, D1262, C1326, D1439, D1465, C2413, D2837]

Proposed: No change requested.

## **Permit Condition D90.3**

Current:

The operator shall periodically analyze the fuel gas for total sulfur content in the refinery gases and butane used in the cogeneration facility according to the following specifications:

The operator shall analyze once every week.

[Rule 2005, 5-6-2005; Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997] [Devices subject to this condition: D860, D866, D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

#### **Permit Condition D90.4**

Current:

The operator shall continuously monitor the H2S concentration in the fuel gases before being burned in this device according to the following specifications:

The operator shall use Gas Chromatograph meeting the requirements of 40CFR60 Subpart J to monitor the parameter. The operator shall also install and maintain a device to continuously record the parameter being monitored. The operator may monitor the H2S concentration at a single location for fuel combustion devices, if monitoring at this location accurately represents the concentration of H2S in the fuel gas being burned in this device.

[40CFR 60 Subpart J, 6-24-2008] [Devices subject to this condition: D27, D29, D31, D33, D67, D69, D151, D153, D155, D250, D252, D313, D416, D417, D418, D419, D421, D423, D425, D532, D535, D538, D539, D541, D570, D625, D626, D627, D628, D629, C910, D1226, D1227,

D1233, D1234, D1236, D1237, D1239, D1240, D1262, D1439, C2413, D28371

Proposed: No change requested.

## **Permit Condition E54.1**

Current:

The operator is not required to vent this equipment to the following equipment if any of the requirements listed below are met:

Device ID: D2808 [DRUM, KNOCK OUT, VERTICAL, SFIA VAPOR RECOVERY WEST]

Requirement number 1: During periods of startup and shutdown modes

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

D1226, D1227, D1233, D1234, D1236, D1237, D1239, D1240]

Proposed: No change requested.

## **Permit Condition E71.1**

Current:

The operator shall not fire this equipment during the startup mode of operation.

[Rule 1303(b)(2)-Offset, 5-10-1996] [Devices subject to this condition: D1227, D1234, D1237, D1240]

Proposed: No change requested.

#### **Permit Condition H23.1**

Current:

This equipment is subject to the applicable requirements of the following rules or regulations:

H2S; 40CFR60, SUBPART J

[40CFR 60 Subpart J, 6-24-2008] [Devices subject to this condition: D27, D29, D31, D33, D67, D69, D151, D153, D155, D250, D252, D313, D416, D417, D418, D419, D421, D423, D425, D532, D535, D538, D539, D541, D570, D625, D626, D627, D628, D629, C910, D1227, D1233, D1234, D1236, D1237, D1239, D1240, D1262, C1326, D1439, D1465, C2413, D2837]

Proposed: No change requested.

# Permit Condition H23.19

Current:

This equipment is subject to the applicable requirements of the following rules or regulations:

BP West Coast Products LLC

January 2010

H2S; 40CFR60, SUBPART J

NOX; 40CFR60, SUBPART Db

[40CFR 60 Subpart Db, 1-28-2009; 40CFR 60 Subpart J, 6-24-2008]

[Devices subject to this condition: D1227, D1234, D1237, D1240]

Proposed: No change requested.

# **SCR SYSTEM CONDITIONS**

#### Permit Condition A99.4

<u>Current</u>: The 20 ppm NH3 emission limit(s) shall not apply when this equipment is

operating at startup and shutdown modes.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

C1242, C1248, C1252, C1256]

Proposed: No change requested.

# Permit Condition D12.9

<u>Current</u>: The operator shall install and maintain a(n) temperature gauge to

accurately indicate the temperature at the inlet to the SCR unit.

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

C1242, C1248, C1252, C12561

Proposed: No change requested.

# **Permit Condition D28.1**

<u>Current</u>: The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted at least annually. The test shall be conducted to determine the NOX emissions at the outlet. The test shall be conducted to determine the SOX emissions at the outlet. The test shall be conducted to determine the flow rate at the outlet. The test shall be conducted to determine the CO emissions at the outlet. The test shall be conducted to determine the total hydrocarbon emissions at the outlet. The test shall be conducted to determine the total PM emissions at the outlet. The test shall be conducted to determine the NH3 emissions at the outlet. The test shall be conducted to determine the formaldehyde emissions at the outlet.

[Rule 1303(a)(1)-BACT, 5-10-1996; Rule 1303(b)(2)-Offset, 5-10-1996; Rule 3004(a)(4)-Periodic Monitoring, 12-12-1997] [Devices subject to this condition: C1242, C1248, C1252, C1256]

Proposed: No change requested.

# **Permit Condition E73.2**

Current:

Notwithstanding the requirements of Section E conditions, the operator may, at his discretion, choose not to use ammonia injection if any of the following requirement(s) are met:

Temperature measured at the SCR inlet is less than 500 Deg. F

[Rule 1303(a)(1)-BACT, 5-10-1996] [Devices subject to this condition:

C1242, C1248, C1252, C1256]

Proposed: No change requested.

# **Permit Condition D82.1**

Current:

The operator shall install and maintain a CEMS to measure the following parameters:

Oxygen concentration in percent volume.

CO concentration in ppmv.

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

[Rule 1303(a)(1)-BACT, 5-10-1996; Rule 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition: C1243, C1249, C1253, C1257]

Proposed: No change requested.

# ATTACHMENT A PERMIT APPLICATION FEE CALCULATIONS

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Cogen Unit No. 4	System	411171	17	4	Ŋ	fuel		\$ 10,942.07 Yes	Yes	No	No	\$ 5,471.04

RECLAIM &
Title V Permit
Amendment
Fee \$0.00

Subtotal:

Total Fees: \$27,355.19



# BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA 1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION
FOR THE WATSON COGENERATION
STEAM AND ELECTRICITY RELIABILITY
PROJECT

Docket No. 09-AFC-1

PROOF OF SERVICE LIST (Revised 1/27/10)

#### **APPLICANT**

Ross Metersky BP Products North America, Inc. 700 Louisiana Street, 12th Floor Houston, Texas 77002 ross.metersky@bp.com

#### APPLICANT'S CONSULTANTS

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#### COUNSEL FOR APPLICANT

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#### INTERESTED AGENCIES

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#### **ENERGY COMMISSION**

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#### **DECLARATION OF SERVICE**

I, <u>Cindy Kyle-Fischer</u>, declare that on March 2, 2010, I served and filed copies of the attached *Application for Change of Condition to Watson Cogeneration Units 1-4 (Watson Cogeneration Steam and Electric Reliability Project)* and the attached *Addendum Application for Using Aqueous Ammonia in Watson Cogeneration Steam and Electric Reliability Project, A/Ns 496922, 496924, and 496925*, each dated February 24, 2010. The original documents, filed with the Docket Unit, are accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[www.energy.ca.gov/sitingcases/watson]**.

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

#### (Check all that Apply)

#### **FOR SERVICE TO ALL OTHER PARTIES:**

Χ	sent electronically to all email addresses on the Proof of Service list
Χ	_ by personal delivery or by depositing in the United States mail at Denver, Colorado with
first	-class postage thereon fully prepaid and addressed as provided on the Proof of Service list
abo	ve to those addresses <b>NOT</b> marked "email preferred."

#### AND

#### FOR FILING WITH THE ENERGY COMMISSION:

<u>X</u>	_sending an origina	ıl paper copy and	l one e	electronic copy,	mailed	and e	mailed	respectiv	vely,
	ne address below (							-	

#### OR

depositing in the mail an original and paper copies, as follows
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#### **CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. <u>09-AFC-1</u> 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512 docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

C bsle-had :