ROUTING RECORD

DATE	FROM	TO	ACTION
JAN 20 2011	RGC	CSB	E-DET
APR 12 2011	RGC	GT	2nd Review
5/31/11	CSB	RGC	P/C Recommend.
MAY 31 2011	RGC	P/S	P/C
AUG 12 2011	RGC	MW	P/C → P/S
8/21/2012	MW	RGC	P/C — APPD

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

See 1/50 of 517841-42, 37-39
AUG 10 2012 RGC P/S G19815

TV: 517837

G19815_mach

Identical to: 517838 ✓
517839
517842

APPL # 517840
I.D. # 166073

BETA OFF SHORE
OCS LEASE PARCELS P300/P301
HUNTINGTON BEACH
ISTALL DIESEL OXIDATION CATALYST
ELLEN E. CRANE ICE Date: 01/18/11

MAIN FOLDER

D67

D

BETA OFF SHORE
ISTALL DIESEL OXIDATION CATALYST

AP 517840
ID 166073

South Coast Air Quality Management District

Form 400-A

Application Form for Permit or Plan Approval

List only one piece of equipment or process per form.

[redacted]

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

Section A - Operator Information

1. **Facility Name** (Business Name of Operator to Appear on the Permit): Beta Offshore - Beta OCS Platforms Facility

2. **Valid AQMD Facility ID** (Available On Permit Or Invoice Issued By AQMD): 166073

3. **Owner's Business Name** (If different from Business Name of Operator):

Section B - Equipment Location Address

4. **Equipment Location Is:** (●) Fixed Location ( ) Various Location
(For equipment operated at various locations, provide address of initial site.)

OCS Lease Parcels P300/P301 (Federal Waters) (Street Address)
, CA (City / Zip)
Marina Robertson (Contact Name) HSE Manager (Title)
(562) 628-1526 (Phone #) Ext. (562) 628-1536 (Fax #)
E-Mail: mrobertson@betaoffshore.com

Section C - Permit Mailing Address

5. **Permit and Correspondence Information:**
☐ Check here if same as equipment location address

111 West Ocean Blvd., Ste. 1240 (Address)
Long Beach (City), CA (State) 90802 (Zip)
Marina Robertson (Contact Name) HSE Manager (Title)
(562) 628-1526 (Phone #) Ext. (562) 628-1536 (Fax #)
E-Mail: mrobertson@betaoffshore.com

Section D - Application Type

6. **The Facility Is:** ( ) Not In RECLAIM or Title V ( ) In RECLAIM ( ) In Title V (●) In RECLAIM & Title V Programs

7. **Reason for Submitting Application** (Select only ONE):

7a. New Equipment or Process Application:
- ( ) New Construction (Permit to Construct)
- ( ) Equipment On-Site But Not Constructed or Operational
- ( ) Equipment Operating Without A Permit *
- ( ) Compliance Plan
- ( ) Registration/Certification
- ( ) Streamlined Standard Permit

7b. Facility Permits:
- ( ) Title V Application or Amendment (Also submit Form 500-A1)
- ( ) RECLAIM Facility Permit Amendment

7c. Equipment or Process with an Existing/Previous Application or Permit:
- ( ) Administrative Change
- (●) Alteration/Modification (50)
- ( ) Alteration/Modification without Prior Approval *
- ( ) Change of Condition
- ( ) Change of Condition without Prior Approval *
- ( ) Change of Location
- ( ) Change of Location without Prior Approval *
- ( ) Equipment Operating with an Expired/Inactive Permit *

Existing or Previous Permit/Application
If you checked any of the items in 7c., you MUST provide an existing Permit or Application Number: ~~485759~~ AIN 5116631 G12361

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. **Estimated Start Date of Construction** (mm/dd/yyyy): 02/01/2011
8b. **Estimated End Date of Construction** (mm/dd/yyyy): 03/31/2011
8c. **Estimated Start Date of Operation** (mm/dd/yyyy): 04/01/2011

9. **Description of Equipment or Reason for Compliance Plan** (list applicable rule): Install diesel oxidation catalyst on diesel IC engine to reduce VOC emissions.

10. **For identical equipment, how many additional applications are being submitted with this application?** (Form 400-A required for each equipment / process): 3

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) (●) No ( ) Yes

12. **Has a Notice of Violation (NOV) or a Notice to Comply (NC) been issued for this equipment?** (●) No ( ) Yes
If Yes, provide NOV/NC#:

Section E - Facility Business Information

13. **What type of business is being conducted at this equipment location?**

14. **What is your business primary NAICS Code?** (North American Industrial Classification System): 211111

15. **Are there other facilities in the SCAQMD jurisdiction operated by the same operator?** ( ) No (●) Yes

16. **Are there any schools (K-12) within 1000 feet of the facility property line?** (●) No ( ) Yes

Section F - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. **Signature of Responsible Official:** SR

18. **Title of Responsible Official:** VP and COO

19. **I wish to review the permit prior to issuance.** (This may cause a delay in the application process.) ( ) No (●) Yes

20. **Print Name:** Steve Liles

21. **Date:** 12-28-10

22. **Do you claim confidentiality of data?** (If Yes, see instructions.) (●) No ( ) Yes

23. **Check List:** ☒ Authorized Signature/Date ☒ Form 400-CEQA ☒ Supplemental Form(s) (ie., Form 400-E-xx) ☒ Fees Enclosed

AQMD USE ONLY	APPLICATION TRACKING #	CHECK #	AMOUNT RECEIVED	PAYMENT TRACKING #	VALIDATION
	517840	3267	$ 12,719.72	92015	1/11/11 DR

DATE	APP REJ	DATE	APP REJ	CLASS	BASIC CONTROL	EQUIPMENT CATEGORY CODE	TEAM	ENGINEER	REASON/ACTION TAKEN
				0 III		040901	10		

2/16/11
3/17/11
4/6

South Coast Air Quality Management District

Form 400-E-13b
Non-Emergency Internal Combustion Engine

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

[redacted]

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

Section A - Operator Information

Facility Name (Business Name of Operator That Appears On Permit): Beta Offshore - Beta OCS Platforms Facility

Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 166073

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): OCS Lease Parcels P300/P301 (Federal Waters)

(•) Fixed Location ( ) Various Locations

Section B - Equipment Description

Internal Combustion Engine

Is the ICE an EPA Certified or Qualifying Non-Road Engine? (•) No ( ) Yes

If yes, provide EPA Certificate No., and attach copy: _____

Manufacturer: Detroit Diesel | Model: 1064-7001 | Serial No.: _____

Date of Manufacture: pre-1990 (mm/dd/yyyy) Date of Installation: pre-1990 (mm/dd/yyyy)

Note: For an ICE manufactured after 7/18/94, please provide manufacturer's specification and guarantee.

Manufacturer Maximum Rating: 195 BHP@ 1800 RPM

ICE Function (Check all that apply)

☐ Electrical Generator ☐ Fire Pump ☐ Compressor ☐ Co-Generation
☐ Flood Control ☐ Pump Driver ☒ Other (specify): Crane Driver

Type

(•) Stationary ( ) Portable

How Is This Type of Equipment Used? (Check All That Apply) ☒ Within Facility ☐ Off-Site ☐ Rental ☐ Non-Rental

Fuel

☐ Natural Gas ☐ LPG ☐ Refinery Gas* ☐ Digester Gas* ☐ Landfill Gas*
☒ Diesel Oil No. 2 ☐ Other*: _____
*If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content.

Stand-By Fuel

☐ Natural Gas ☐ LPG ☐ Refinery Gas* ☐ Digester Gas* ☐ Landfill Gas*
☐ Diesel Oil No. 2 ☐ Other*: _____
*If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content.

Cycle Type

(•) Two Cycle ( ) Four Cycle

Combustion Type

(•) Lean Burn ( ) Rich Burn

No. of Cylinders

( ) Four (•) Six ( ) Eight ( ) Ten ( ) Twelve ( ) Sixteen ( ) Other: _____

Aspiration Type

( ) Turbocharged ( ) Turbocharged/Aftercooled (•) Naturally Aspirated
☐ Timing Retarded ≥ 4° (relative to standard timing)

Air Pollution Control (If Applicable)

( ) Selective Catalytic Reduction (SCR) * ( ) No Controls
( ) Selective Non-Catalytic Reduction (SNCR) * ( ) Air Fuel Ratio Controller
( ) Non-selective Catalytic Reduction (NSCR) (•) Other (specify): Diesel Oxidation Catalyst

* Separate application is required.

Manufacturer: Johnson-Matthey | Model: JM P/N CXX0-S-8-4

If already permitted, indicate Permit No.: 485759 | Device No.: D87

South Coast Air Quality Management District

Form 400-E-13b
Non-Emergency Internal Combustion Engine

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Section C - Operation Information

Fuel Consumption

Maximum Rated Load: 10.40 gal./hr. OR _____ cu.ft./hr

Average Load: _____ gal./hr. OR _____ cu.ft./hr.

Emissions Data

Pollutants	Maximum Emissions Before Control: gm/Bhp-hr	Maximum Emissions Before Control: PPM (15% O_2)	Maximum Emissions After Control: gm/Bhp-hr	Maximum Emissions After Control: PPM (15% O_2)
ROG				< 250
NOx				
CO				
PM				
SOx				

Emissions Reference (attach):

- ☐ Manufacturer's Guarantee
- ☒ Catalytic Manufacturer's Guarantee
- ☐ Source Test Data
- ☐ EPA Emission Factors
- ☐ Other (specify): _____

Operating Schedule

Normal: _____ hours/day _____ days/week _____ weeks/yr

Maximum: _____ hours/day _____ days/week _____ weeks/yr

Section D - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application is true and correct.

Preparer Info

Signature: Marina Robertson Date: 12-28-10

Title: HSE Manager Company Name: Beta Offshore

Name: Marina Robertson

Phone #: (562) 628-1526 Fax #: (562) 628-1536

Email: mrobertson@betaoffshore.com

Contact Info

Name: Marina Robertson

Title: HSE Manager Company Name: Beta Offshore

Phone #: (562) 628-1526 Fax #: (562) 628-1536

Email: mrobertson@betaoffshore.com

[redacted]

South Coast Air Quality Management District

Form 400-E-5
Selective Catalytic Reduction (SCR) System, Oxidation Catalyst, and Ammonia Catalyst

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

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

Section A - Operator Information

Facility Name (Business Name of Operator That Appears On Permit): Beta Offshore - Beta OCS Platforms Facility

Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 166073

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): OCS Lease Parcels P300/P301 (Federal Waters)

(●) Fixed Location ( ) Various Locations

Section B - Equipment Description

Selective Catalytic Reduction (SCR)

SCR Catalyst	Manufacturer:____ Catalyst Active Material:____ Model Number:____ Type:____ Size of Each Layer or Module: L:____ ft.____ in. W:____ ft.____ in. H:____ ft.____ in. No. of Layers or Modules:____ Total Volume:____ cu. ft. Total Weight:____ lbs.
Reducing Agent	( ) Urea ( ) Anhydrous Ammonia ( ) Aqueous Ammonia____ % Injection Rate:____ lb/hr
Reducing Agent Storage*	Diameter:____ ft.____ in. Height:____ ft.____ in. Capacity:____ gal Pressure Setting:____ psia * A separate permit may be needed for the storage equipment.
Space Velocity	Gas Flow Rate/Catalyst Volume:____ per hour
Area Velocity	Gas Flow Rate/Wetted Catalyst Surface Area:____ ft/hr
Manufacturer's Guarantee	NOx:____ ppm $\%O_2$:____ NOx:____ gm/bhp-hr Ammonia Slip:____ ppm @ ____ $\%O_2$
Catalyst Life	____ years (expected)
Cost	Capital Cost:____ Installation Cost:____ Catalyst Replacement Cost:____

Oxidation Catalyst

Oxidation Catalyst	Manufacturer: Johnson-Matthey Catalyst Active Material: Platinum Model Number: JM P/N CXX0-S-8-4 Type: Coated Braised Metallic 14.5" Diam. x 3.5" L Size of Each Layer or Module: L:____ ft.____ in. W:____ ft.____ in. H:____ ft.____ in. No. of Layers or Modules: 1 Total Volume: 0.335 cu. ft. Total Weight: 56 lbs.
Space Velocity	Gas Flow Rate/Catalyst Volume: 137000 per hour
Manufacturer's Guarantee	VOC: 70% ppm VOC:____ gm/bhp-hr $\%O_2$:____ CO: 80% ppm CO:____ gm/bhp-hr $\%O_2$:____
Catalyst Life	> 2 years (expected)
Cost	Capital Cost:____ Installation Cost:____ Catalyst Replacement Cost:____

South Coast Air Quality Management District

Form 400-E-5
Selective Catalytic Reduction (SCR) System, Oxidation Catalyst, and Ammonia Catalyst

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Forms 400-A, Form 400-CEQA, and Form 400-PS.

Section B - Equipment Description (cont.)

Ammonia Catalyst

Ammonia Catalyst	Manufacturer:_____ Catalyst Active Material:_____ Model Number:_____ Type:_____ Size of Each Layer or Module: L:_____ ft._____ in. W:_____ ft._____ in. H:_____ ft._____ in. No. of Layers or Modules:_____ Total Volume:_____ cu. ft. Total Weight:_____ lbs.
Space Velocity	Gas Flow Rate/Catalyst Volume:_____ per hour
Manufacturer's Guarantee	NH_3:_____ ppm $\%O_2$:_____
Catalyst Life	_____ years (expected)
Cost	Capital Cost:_____ Installation Cost:_____ Catalyst Replacement Cost:_____

Section C - Operation Information

Operating Temperature	Minimum Inlet Temperature: 480 °F (from cold start) Maximum Temperature: 1380 °F Warm-up Time: 0 hr. 30 min. (maximum)
Operating Schedule	Normal: _____ hours/day _____ days/week _____ weeks/yr Maximum: _____ hours/day _____ days/week _____ weeks/yr

Section D - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application is true and correct.

Preparer Info	Signature: Marina Robertson Date: 12-28-10 Title: HSE Manager Company Name: Beta Offshore	Name: Marina Robertson Phone #: (562) 628-1526 Fax #: (562) 628-1536 Email: mrobertson@betaoffshore.com
Contact Info	Name: Marina Robertson Title: HSE Manager Company Name: Beta Offshore	Phone #: (562) 628-1526 Fax #: (562) 628-1536 Email: mrobertson@betaoffshore.com

South Coast Air Quality Management District

Form 400 - XPP

Express Permit Processing Request

Form 400-A, Form 400-CEQA and one or more 400-E-xx form(s) must accompany all submittals.

Mail To:
SCAQMD
P.O Box 4944
Diamond Bar, CA 91765-0944

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

Section A - Operator Information

1. Facility Name (Business Name of Operator To Appear On The Permit): Beta Offshore - Beta OCS Platforms Facility

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 166073

Section B - Equipment Location Address

3. (●) Fixed Location ( ) Various Location
(For equipment operated at various locations, provide address of initial site.)

OCS Lease Parcels P300/P301 (Federal Waters)
Street Address

_____, CA _____
City State Zip

Marina Robertson — HSE Manager
Contact Name Title

(562) 628-1526 — Ext. — (562) 629-1536
Phone # Fax #

mrobertson@betaoffshore.com
E-Mail

Section C - Permit Mailing Address

4. Permit and Correspondence Information:
☐ Check here if same as equipment location address

111 W. Ocean Blvd., Ste. 1240
Address

Long Beach, CA 90802
City State Zip

Marina Robertson — HSE Manager
Contact Name Title

(562) 628-1526 — Ext. — (562) 628-1536
Phone # Fax #

mrobertson@betaoffshore.com
E-Mail

Section D - Authorization/Signature

I understand that the Expedited Permit Processing fees must be submitted at the time of application submittal, and that the application may be subject to additional fees per Rule 301. I understand that requests for Express Permit Processing neither guarantees action by any specific date nor does it guarantee permit approval; that Express Permit Processing is subject to availability of qualified staff; and that once Express Permit Processing has commenced, the expedited fees will not be refunded. I hereby certify that all information contained herein and information submitted with the application are true and correct.

5. Signature of Responsible Official:

6. Title of Responsible Official: Vice President and Chief Operating Officer

7. Print Name of Responsible Official: Steve Liles

8. Date: 12-28-10

9. Phone #: (562) 628-1526

10. Fax #: (562) 628-1536

AQMD USE ONLY	APPLICATION TRACKING #		TYPE B C	EQUIPMENT CATEGORY CODE:	FEE SCHEDULE: $		VALIDATION
ENG. DATE A R	ENG. DATE A R		CLASS I III	ASSIGNMENT Unit Engineer	CHECK/MONEY ORDER #	AMOUNT $	TRACKING #

South Coast Air Quality Management District

Form 400-CEQA
California Environmental Quality Act (CEQA) Applicability

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

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

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project[1] has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines §15060(a)].[2] Refer to the attached instructions for guidance in completing this form.[3] For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project at the same time, only one 400-CEQA form is necessary for the entire project. If you need assistance completing this form, contact Permit Services at (909) 396-3385 or (909) 396-2668.

Section A - Facility Information

1. Facility Name (Business Name of Operator To Appear On The Permit): Beta Offshore - Beta OCS Platforms Facility

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 166073

3. Project Description:

Install diesel oxidation catalysts on five IC engines to reduce VOC emissions.

Section B - Review For Exemption From Further CEQA Action

Check "Yes" or "No" as applicable

	Yes	No	Is this application for:
1.	○	◉	**A CEQA and/or NEPA document previously or currently prepared that specifically evaluates this project?** If yes, attach a copy of the signed Notice of Determination to this form.
2.	○	◉	**A request for a change of permittee only (without equipment modifications)?**
3.	○	◉	**A functionally identical permit unit replacement with no increase in rating or emissions?**
4.	○	◉	**A change of daily VOC permit limit to a monthly VOC permit limit?**
5.	○	◉	**Equipment damaged as a result of a disaster during state of emergency?**
6.	○	◉	**A Title V** (i.e., Regulation XXX) **permit renewal (without equipment modifications)?**
7.	○	◉	**A Title V administrative permit revision?**
8.	○	◉	**The conversion of an existing permit into an initial Title V permit?**

If "**Yes**" is checked for any question in Section B, your application does not require additional evaluation for CEQA applicability. Skip to Section D - Signatures on page 2 and sign and date this form.

Section C - Review of Impacts Which May Trigger CEQA

Complete Parts I-VI by checking "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.

	Yes	No	Part I - General
1.	○	◉	**Has this project generated any known public controversy regarding potential adverse impacts that may be generated by the project?** Controversy may be construed as concerns raised by local groups at public meetings; adverse media attention such as negative articles in newspapers or other periodical publications, local news programs, environmental justice issues, etc.
2.	○	◉	**Is this project part of a larger project?** If yes, attach a separate sheet to briefly describe the larger project.
			Part II - Air Quality
3.	○	◉	**Will there be any demolition, excavating, and/or grading construction activities that encompass an area exceeding 20,000 square feet?**
4.	○	◉	**Does this project include the open outdoor storage of dry bulk solid materials that could generate dust?** If Yes, include a plot plan with the application package.

[1] A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry-cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.

[2] To download the CEQA guidelines, visit http://ceres.ca.gov/env_law/state.html.

[3] To download this form and the instructions, visit http://www.aqmd.gov/ceqa or http://www.aqmd.gov/permit

Section C - Review of Impacts Which May Trigger CEQA (cont.)			
	Yes	No	Part II - Air Quality (cont.)
5.	○	◉	**Would this project result in noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements?** For example, compost materials or other types of greenwaste (i.e., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to Rule 402 – Nuisance.
6.	○	◉	**Does this project cause an increase of emissions from marine vessels, trains and/or airplanes?**
7.	○	◉	**Will the proposed project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound on the attached Table 1?[4]**
			Part III – Water Resources
8.	○	◉	**Will the project increase demand for water at the facility by more than 5,000,000 gallons per day?** The following examples identify some, but not all, types of projects that may result in a "yes" answer to this question: 1) projects that generate steam; 2) projects that use water as part of the air pollution control equipment; 3) projects that require water as part of the production process; 4) projects that require new or expansion of existing sewage treatment facilities; 5) projects where water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; and 6) projects that require new or expansion of existing water supply facilities.
9.	○	◉	**Will the project require construction of new water conveyance infrastructure?** Examples of such projects are when water demands exceed the capacity of the local water purveyor to supply sufficient water for the project, or require new or modified sewage treatment facilities such that the project requires new water lines, sewage lines, sewage hook-ups, etc.
			Part IV – Transportation/Circulation
10.			**Will the project result in** (Check all that apply):
	○	◉	**a. the need for more than 350 new employees?**
	○	◉	**b. an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?**
	○	◉	**c. increase customer traffic by more than 700 visits per day?**
			Part V – Noise
11.	○	◉	**Will the project include equipment that will generate noise GREATER THAN 90 decibels (dB) at the property line?**
			Part VI – Public Services
12.			**Will the project create a permanent need for new or additional public services in any of the following areas** (Check all that apply):
	○	◉	**a. Solid waste disposal?** Check "No" if the projected potential amount of wastes generated by the project is less than five tons per day.
	○	◉	**b. Hazardous waste disposal?** Check "No" if the projected potential amount of hazardous wastes generated by the project is less than 42 cubic yards per day (or equivalent in pounds).

REMINDER: *For each "Yes" response in Section C, attach all pertinent information including but not limited to estimated quantities, volumes, weights, etc.***

Section D - Signatures

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

1. Signature of Responsible Official of Firm:		2. Title of Responsible Official of Firm:
		Vice President and Chief Operating Officer
3. Print Name of Responsible Official of Firm:		4. Date Signed:
Steve Liles		12-28-10
5. Phone # of Responsible Official of Firm:	6. Fax # of Responsible Official of Firm:	7. Email of Responsible Official of Firm:
(562) 628-1526	(562) 628-1536	sliles@betaoffshore.com
8. Signature of Preparer, (If prepared by person other than responsible official of firm):		9. Title of Preparer:
Marina Robertson		HSE Manager
10. Print Name of Preparer:		11. Date Signed:
Marina Robertson		12-28-10
12. Phone # of Preparer:	13. Fax # of Preparer:	14. Email of Preparer:
(562) 628-1526	(562) 628-1536	mrobertson@betaoffshore.com

THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND ANY ATTACHMENTS WITH FORM 400-A.

[4] Table 1 – Regulated Substances List and Threshold Quantities for Accidental Release Prevention can be found in the Instructions for Form 400-CEQA.

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

FEE DATA - SUMMARY SHEET

Application No :	517840	IRS/SS No:	
Previous Application No:	516031	Previous Permit No:	G12361

Company Name :	BETA OFFSHORE	Facility ID:	166073
Equipment Street:	OCS LEASE PARCELS P300/P301 , HUNTINGTON BEACH CA 92648		
Equipment Desc :	I C E (50-500 HP) N-EM STAT DIESEL		

Equipment Type :	BASIC			Fee Charged by:	B-CAT
B-CAT NO. :	040901	C-CAT NO:	00	Fee Schedule:	B
Facility Zone :	18	Deemed Compl. Date:	2/17/2011	Public Notice:	NO

Evaluation Type :	ALTERATION/MODIFICATION (PO)	Small Business:	☐
Disposition :	Approve PO, Recommended by Engineer	Higher Fees for Failing to Obtain a Permit:	☐
Lead Appl. No :	517838	Identical Permit Unit:	☒

Air quality Analysis			$0.00	Filing Fee Paid:	$0.00
E.I.R			$0.00	Permit Processing Fee Paid:	$1,570.95
Health Risk Assessment			$0.00	Permit Processing Fee Calculated*:	$1,047.30
Public Notice Preparation Fee			$0.00		
Public Notice Publication Fee			$0.00	Permit Processing Fee Adjustment:	$-523.65
Expedited Processing	Hours:	0.00	$523.65		
Source Test Review	Hours:	0.00	$0.00		
Time & Material	Hours:	0.00	$0.00		
				Total Additional Fee:	$523.65
				Additional Charge:	$0.00

COMMENTS:

RECOMMENDED BY: MARIA VIBAL

DATE: 07/31/2012

REVIEWED BY: _____

DATE: AUG 10 2012

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

FEE DATA - SUMMARY SHEET

Application No :	517840	IRS/SS No:	
Previous Application No:	516031	Previous Permit No:	G12361

Company Name :	BETA OFF SHORE
Equipment Street:	OCS LEASE PARCELS P300/P301 , HUNTINGTON BEACH CA 92648
Equipment Desc :	I C E (50-500 HP) N-EM STAT DIESEL

Facility ID: 166073

Equipment Type :	BASIC			Fee Charged by:	B-CAT
B-CAT NO. :	040901	C-CAT NO:	00	Fee Schedule:	B
Facility Zone :	18	Deemed Compl. Date:	2/17/2011	Public Notice:	NO

Evaluation Type :	ALTERATION/MODIFICATION (PC)
Disposition :	Approve PC, Recommended by Engineer
Lead Appl. No :	

Small Business: ☐
Higher Fees for Failing to Obtain a Permit: ☐
Identical Permit Unit: ☒

Air quality Analysis			$0.00	Filing Fee Paid:	$0.00
E.I.R			$0.00	Permit Processing Fee Paid:	$1,570.95
Health Risk Assessment			$0.00	Permit Processing Fee Calculated*:	$1,047.30
Significant Project			$0.00	Permit Processing Fee Adjustment:	$-523.65
Expedited Processing	Hours:	0.00	$523.65		
Source Test Review	Hours:	0.00	$0.00		
Time & Material	Hours:	0.00	$0.00		
				Total Additional Fee:	$523.65
				Additional Charge:	$0.00

COMMENTS:

RECOMMENDED BY: C S BHATT

DATE: 05/31/2011

MAY 31 2011

REVIEWED BY: _____

DATE: _____

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT AND P/O NO P/C PENALTY

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

AEIS DATA SHEET

Company Name : BETA OFFSHORE

Facility ID : 166073

Equipment Address : OCS LEASE PARCELS P300/P301
HUNTINGTON BEACH CA 92648

Application Number : 517840

Equipment B-Cat : 040901

Estimated Completion Date : 07/31/12

Equipment C-Cat :

Equipment Type : Basic

Equipment Description : I C E (50-500 HP) N-EM STAT DIESEL

	Emissions	
Emittants	R1 LB/HR	R2 LB/HR
CO	0.02	0.02
NOX	0.20	0.20
PM10	0.01	0.01
ROG	0.01	0.01

Applicable Rules

1110.2	02/01/2008	Emissions from Gaseous-and Liquid-fueled Engines
1148.1	03/05/2004	Oil and Gas Production Wells
1183	03/12/1993	Outer Continental Shelf (OCS) Air Regulations
2012	05/06/2005	Requirements of MRR for NOx Emissions (RECLAIM)
401	11/09/2001	Visible Emissions
402	05/07/1976	Nuisance
404	02/07/1986	Particulate Matter - Concentration
431.2	09/15/2000	Sulfur Content of Liquid Fuels

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Daily Start Times :	08:00	08:00	08:00	08:00	08:00	08:00	08:00
Daily Stop Times :	09:40	09:40	09:40	09:40	09:40	09:40	09:40

User's Initials : MV02 Date: 07/31/12 Supervisor's Name : _____ Review Date : ___/___/___

N S R D A T A S U M M A R Y S H E E T

Application No:	517840
Application Type:	Alteration/Modification
Application Status:	PENDAPPRV
Previous Apps,Dev,Permit #:	516031, 0 - , NONE

Company Name:	BETA OFFSHORE
Company ID:	166073
Address:	OCS LEASE PARCELS P300/P301,HUNTINGTON BEA
RECLAIM:	NOX
RECLAIM Zone:	01
Air Basin:	SC
Zone:	18
Title V:	YES

Device ID:	0 -
Estimated Completion Date:	05-31-2011
Heat Input Capacity:	0 Million BTU/hr
Priority Reserve:	NONE - No Priority Access Requested
Recommended Disposition:	31 - PERMIT TO OPERATE GRANTED
PR Expiration:	
School Within 1000 Feet:	NO
Operating Weeks Per Year:	52
Operating Days Per Week:	7
Monday Operating Hours:	08:00 to 09:40
Tuesday Operating Hours:	08:00 to 09:40
Wednesday Operating Hours:	08:00 to 09:40
Thursday Operating Hours:	08:00 to 09:40
Friday Operating Hours:	08:00 to 09:40
Saturday Operating Hours:	08:00 to 09:40
Sunday Operating Hours:	08:00 to 09:40

Emittant:	CO
BACT:	
Cost Effectiveness:	NO
Source Type:	MINOR
Emis Increase:	0
Modeling:	N/A
Public Notice:	N/A
CONTROLLED EMISSION	
Max Hourly:	0.04 lbs/hr
Max Daily:	0.06 lbs/day
UNCONTROLLED EMISSION	
Max Hourly:	0.04 lbs/hr
Max Daily:	0.06 lbs/day
CURRENT EMISSION	
BACT 30 days Avg:	0 lbs/day
Annual Emission:	20.38 lbs/yr
District Exemption:	None

Emittant:	NOX
BACT:	
Cost Effectiveness:	NO
Source Type:	MAJOR
Emis Increase:	0
Modeling:	N/A
Public Notice:	N/A
CONTROLLED EMISSION	
Max Hourly:	0.2 lbs/hr
Max Daily:	0.28 lbs/day
UNCONTROLLED EMISSION	
Max Hourly:	0.2 lbs/hr
Max Daily:	0.28 lbs/day
CURRENT EMISSION	
BACT 30 days Avg:	0 lbs/day
Annual Emission:	101.92 lbs/yr
District Exemption:	None

Emittant:	PM10
BACT:	
Cost Effectiveness:	NO
Source Type:	MINOR
Emis Increase:	0
Modeling:	N/A
Public Notice:	N/A
CONTROLLED EMISSION	
Max Hourly:	0.01 lbs/hr
Max Daily:	0.01 lbs/day
UNCONTROLLED EMISSION	
Max Hourly:	0.01 lbs/hr
Max Daily:	0.01 lbs/day
CURRENT EMISSION	
BACT 30 days Avg:	0 lbs/day
Annual Emission:	5.1 lbs/yr
District Exemption:	None

Emittant:	ROG
BACT:	
Cost Effectiveness:	NO
Source Type:	MINOR
Emis Increase:	0
Modeling:	N/A
Public Notice:	N/A
CONTROLLED EMISSION	
Max Hourly:	0.01 lbs/hr
Max Daily:	0.02 lbs/day
UNCONTROLLED EMISSION	
Max Hourly:	0.02 lbs/hr
Max Daily:	0.03 lbs/day
CURRENT EMISSION	
BACT 30 days Avg:	0 lbs/day
Annual Emission:	6.07 lbs/yr
District Exemption:	None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: _____

Processed By: mvibal 7/31/2012 3:25:47 PM

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING AND COMPLIANCE

M E M O R A N D U M

Date: July 30, 2012

To: Rob Castro, Senior Air Quality Engineer

From: Maria Vibal

Subject: P/C to P/O – A/N's 517838, 517839, 517840, 517841 and 517842

Objective: Applications are for modification of existing crane diesel-fueled engines by installing diesel oxidation catalysts to comply with the Rule 1110.2 requirements of 250 ppmvd VOC and 2000 ppmvd of CO, both measured at 15% O_2.

Highlights of Findings :

1. The referenced applications were issued Permits to Construct (PC) in June, 2011.
2. Beta Offshore completed the installation of the diesel oxidation catalysts on the crane engines in the first half of 2011.
3. Almega Environmental and Technical Services conducted source tests on the engines right after the completion of the retrofits. The tests were conducted in August-September, 2011.
4. Beta Offshore submitted the test report on the five crane engines to SCAQMD on Oct. 12, 2011. Report shows that all five engines comply with the Rule 1110.2 limits of 250 ppmvd VOC and 2000 ppmvd of CO, both measured at 15% O_2.
5. Source Test Engineering reviewed the test report and deemed it " acceptable" on April 27, 2012.

Recommendations : Disposition the referenced applications as P/O's and incorporate the updates in the RECLAIM Title V facility permit 517837/531454.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

M E M O R A N D U M

DATE: April 27, 2012

TO: Billy Thompson

FROM: Rudy Eden

SUBJECT: Evaluation of Source Test Report:
(Requested by Maria Vibal, October 20, 2011)

AQMD ID: *FACILITY ID NO.* **166073** *A/N.:* **517840, 517841, 517839, 517838, 517842**
COMPANY: **Beta Offshore, Long Beach**
EQUIPMENT: **ICE - Ellen East Crane, ICE - Ellen Center Crane (D87, D91)**
ICE - Eureka East Crane, ICE - Eureka Center Crane (D89, D90)
ICE- Elly East Crane (D92)
TEST LOCATION: **OCS Lease Parcels P300/P301, Huntington Beach, CA 92648**

TEST DATE: **August 16-18 & September 9 & 13, 2011**

REFERENCE: R 11503 (STE Source Test File)

Source Test Engineering has completed the evaluation of the subject source test report and has concluded that it is:

ACCEPTABLE

Compliance with all applicable Rules and/or Permit Conditions, as well as compliance limits, has been acceptably demonstrated. All of the reported gaseous emissions and flows are considered accurate, and they may be used quantitatively as well as qualitatively for emission calculations. Source testing methods and analytical procedures are correct, and results are fully supported with respect to Quality Assurance (QA), accurate calculations, and representative raw data.

The attached evaluation has not been forwarded to the facility or the source testing firm. It is the responsibility of the requestor to review the attached evaluation and forward it to the parties involved, if you concur with our findings. If there are any questions, please contact Michael Cecconi at Ext. 2244.

MG:MAC
Attachment
cc: Mike Garibay
Maria Vibal

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

MONITORING & ANALYSIS DIVISION * SOURCE TEST ENGINEERING BRANCH

SOURCE TEST REPORT EVALUATION

S/T ID: **R 11503**

AQMD ID: *FACILITY ID NO.* **166073** *A/N:* **517840, 517841, 517839, 517838, 517842**

COMPANY: **Beta Offshore, Long Beach**

EQUIPMENT: **ICE - Ellen East Crane, ICE - Ellen Center Crane (D87, D91)**
ICE - Eureka East Crane, ICE - Eureka Center Crane (D89, D90)
ICE- Elly East Crane (D92)

LOCATION: **OCS Lease Parcels P300/P301, Huntington Beach, CA 92648**

REQUESTED BY: **Maria Vibal (Memo Dated October 20, 2011)**

TYPE OF TEST: **PERFORMANCE/COMPLIANCE REPORT** *DOCUMENT DATE:* **September 30, 2011**

REASON FOR TEST: *(TESTING SUBJECT TO THE FOLLOWING RULE, PERMIT, OR SPECIFIED CONDITIONS):*
- VOC - 250 ppm @15% O_2
- CO - 2000 ppm @15% O_2

REQUESTED EVAL: **VOC, CO**

TEST DATE: **August 16-18 & September 9 & 13, 2011**

TEST FIRM: **Almega**

STE EVALUATOR: **Michael Cecconi** *EXT:* **2244** *REVIEW DATE:* **April 27, 2012**

OVERVIEW OF EVALUATION:

OVERALL CONFIDENCE IN REPORTED TEST RESULTS: ☒ **ACCEPTABLE** ☐ **CONDITIONALLY ACCEPTABLE** ☐ **UNACCEPTABLE**

RESTRICTIONS FOR USE OF REPORTED RESULTS:
- No Restrictions. Results for all reported emissions may be used for compliance determination and emission calculations.

COMPLIANCE DETERMINATION:
- Results for all emissions, as reported, are in compliance by an acceptable margin[1], with the Rules/Permit Compliance Limits specified above.

(REFER TO NEXT SECTION FOR COMPLETE DISCUSSION OF TEST RESULTS AND CORRECTED EMISSION INFORMATION, IF APPLICABLE)

[1] **NOTE:** STE assigns a 10% "margin of error" to most emission rates when evaluating emissions for compliance determination. This is due to uncertainties assigned to source testing, in general, and errors associated with individual analytical procedures. As a result, some reported emissions may be judged as being in compliance although they appear to be non-compliant or marginally non-compliant. Similarly, non-compliance is judged using the same margin-of-error.

SOURCE TEST REPORT EVALUATION

DETAILED REVIEW

This source test report has been reviewed by the Evaluations Unit staff. The following specifically explains the restrictions concerning the treatment of the reported source test information:

- ☐ Completeness of Application/Protocol/Report
- ☐ Representativeness of Data & Process
- ☒ Rule/Permit Fulfillment
- ☐ Sampling & Analytical Methods
- ☐ Quality Assurance
- ☐ Calculations

RULE/PERMIT FULFILLMENT

- Section (D)(1)(B) of Rule 1110.2 provides an exemption from the emission limits in Table II of the rule for engines that operate less than 500 hours per year. Permit Condition C1.3 limits the operating time of the engines to less than 500 hours per year. The limits shown below are the applicable limits for these ICEs.
- The testing was performed to show compliance with the following Rule/Permit requirements:
  - VOC - 250 ppm @15% O_2
  - CO - 2000 ppm @15% O_2

  All required testing has been performed and is properly formatted.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

MEMORANDUM

S/T ID:
Received:
Assigned:
Assigned To:
Completed:
(STE Use Only)

DATE: October 20, 2011

TO: Rudy Eden

FROM: Billy Thompson

SUBJECT: Review Request (Included are **FORMS ST-1 & ST-2**[1])

DOCUMENT ATTACHED FOR EVALUATION:

☐ CEMS ☐ Test Protocol ☐ Other: _____

☒ Test Report: (☐ Test Protocol already approved – memo attached ☐ Test Protocol NOT approved by STE)

ADDITIONAL DOCUMENTATION (REQUIRED AS OF MARCH 2002):

Pursuant to the Public Records Act, part or all of the above document attached for evaluation may be subject to public disclosure unless the company claims that the information contained within is "proprietary", "confidential", or a "trade secret". If such a statement was included when this document was submitted to you it must be included, or affirmed by you that such a document was not included:

☐ Document containing a "Statement of Confidentiality" or similar statement, is included with this request for evaluation.

☒ No "Statement of Confidentiality" or similar document was included when this document was submitted to me by the facility or owner/operator.

SIGNED: _____ **TITLE:** Air Quality Engineer

These attached documents are submitted for your evaluation. We would appreciate it if your staff could review and provide comments or approval by the indicated date. Thank you.

REQUESTED RESPONSE DATE: November 11, 2011 ☐ **PRIORITY EVALUATION**

(explain under "COMMENTS" below)

COMPANY NAME: Beta Offshore **FAC.ID:** 166073

EQUIP. ADDRESS: OCS Lease Parcels P300/P301 (Federal Waters)
Huntington Beach CA 92648

BASIC EQUIP: Diesel IC Crane Engines, Detroit, 195 Bhp, Retrofitted w/ Johnson Matthey Oxidation Catalyst

EQUIP IDENT: D87, D89, D90, D91 & D92 (☒DevID☐A/N☐P/N)

RECLAIM USE ONLY: (NOx: ☐MAJ☐LGE☒PRC SOx: ☐MAJ☐LGE)

COMMENTS[2]**:** _____

PROCESSING ENGINEER: Maria Vibal **EXT.** 2422

[1] Forms ST-1 and ST-2 must be completed and attached to this request, or your submittal will be returned.

[2] Explain reason for Priority Review, time constraints, Hearing Board action, clarify testing requirements, etc.

CHECKLIST FOR REQUEST TO REVIEW: SOURCE TEST PROTOCOL, REPORT, OR SPECIAL PROJECT

This *Checklist* (***FORM ST-1***) must accompany any request to evaluate a source test protocol, report, or special project. It may be completed by the requesting AQMD Engineer or Inspector, or a representative of the Source Testing Firm/Laboratory/Contractor. Verify, by checking each item below, that all the requested information has been provided with the attached source test protocol, report, or special project. (An incomplete submittal will be returned, and will ultimately delay the evaluation process):

All Source Test Protocols and Reports Must Include:

- ☒ Completed Review Request Memorandum. (A request for a *"Priority Review"* involves Hearing Board, Abatement Order, or similar critical action, and must be authorized by a manager).
- ☐ Statement of Confidentiality of Test Information, or similar statement, provided by company (if included).
- ☒ Information Request ***FORM ST-2*** with those applicable parts filled out completely.
- ☒ Reason for test, including proposed operating test loads, reference to applicable rules/permit conditions, and key facility, test firm and AQMD personnel.
- ☒ Complete Permit to Construct or Permit to Operate, including all conditions.
- ☒ Brief process description, including maximum and normal operating temperatures, pressures, through-put, etc.
- ☒ Brief description of sampling and analytical methods for each constituent to be measured. If a standard District, EPA, or ARB method "without any deviation" will be used, reference it by method number.
- ☒ Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts/stacks at the sampling locations, along with upstream and downstream distances to flow disturbances, (e.g. elbows, tees, fans) from the sampling locations.
- ☒ Calibration and quality assurance (QA) procedures identified.
- ☒ Statement that source test firm/laboratory qualifies as an *"independent testing laboratory"* under Rule 304 (no conflict of interest), and is approved by AQMD or ARB, if required.
- ☒ Attached test firm AQMD-LAP or CARB approval, if required.

All Source Test Reports Must Also Include:

- ☒ Field raw data sheets and laboratory data forms, where applicable.
- ☒ Gas monitoring stripcharts and/or DAS printouts, legible and properly annotated, where applicable.
- ☒ Complete calculations for volumetric flowrates and emissions rates, where applicable.
- ☒ Complete QA supporting documentation (sampling equipment, cal gases, lab analyses, custodies).
- ☒ (*CEMS & Fuel Meters*): Full identification/documentation for CEMS components and fuel meters (analyzer/fuel meter make, model, s/n, range, calibrations, etc.).
- ☐ (*RECLAIM/Large Source*): "Certificate of No Exceptions for testing RECLAIM Large Sources" completed and signed.

Applicable Source Specific Protocols / Reports Must Also Include:

- ☐ (*VOC Efficiency*): VOC overall efficiency (capture/collection plus control efficiencies), or transfer efficiency describes all sample collection points, verifies total collection, and shows all calculations and documentation, according to specified requirements.
- ☐ (*Organics Loading*): Organic (VOC) liquid loading testing describes all sample collection/monitoring points (both liquid and vapor), verifies representative start/stop time, and shows all calculations and documentation, according to specified requirements.
- ☐ (*Particulates/sulfur*): Particulate testing of effluent gas streams with high amounts of sulfur compounds addresses additional test preparation, equipment, calculations, and documentation.

FORM ST-2 *(TO BE COMPLETED BY E&C REQUESTER)*

MONITORING & ANALYSIS DIVISION | MONITORING & SOURCE TEST ENGINEERING BRANCH

INFORMATION REQUEST FOR PROTOCOL, REPORT, OR SPECIAL PROJECT REVIEW

This *Information Request* (***FORM ST-2***) must accompany any request to evaluate a source test protocol, report, or special project, and it can *only* be completed by the requesting AQMD Engineer or Inspector. Please mark the appropriate items and provide the requested information. The sampling and analytical methods will be reviewed *only* for those constituents identified on this form, so be sure to provide as much information as possible.

Constituent(s) to be measured	Allowable Limit(s)[1]. Concentration (specify ppm as CH_4, @ 3% O_2, etc.)		Allowable Limit(s)[1]. Mass Emission (specify lb/hr, etc.)	Rule or Permit Condition(s)	Sampling Location(s) (SCR inlet, outlet, exhaust, etc.)	Other Requirements (test parameters, BACT, Rule Development, etc.)
☒ CO	2000 ppmvd	☒ Compliance Only ☐ Mass Emissions or Factors		Rule 1110.2	exhaust	15% O_2, 15-min. avg.
☐ CO_2		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ O_2		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ NOx, as NO_2		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ SOx, as SO_2		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ SO_2		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ SO_3		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ H_2S		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ Total Reduced Sulfur, as SO_2		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ NH_3 Slip		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ Aldehydes		☐ Compliance Only ☐ Mass Emissions or Factors				

1. Concentration must include correction to standard point-of-reference (NOx @ *3%O_2*, ROG *as CH_4*, etc.). If there is no "Mass Emission" compliance limit specified, please specify if concentration will be used only for compliance determination or whether it will also be calculated to a mass emission or factor (this will affect how we interpret the reported concentrations).

FORM ST-2 *(TO BE COMPLETED BY E&C REQUESTER)*

MONITORING & ANALYSIS DIVISION | MONITORING & SOURCE TEST ENGINEERING BRANCH

INFORMATION REQUEST FOR SOURCE TEST PROTOCOL, REPORT, OR SPECIAL PROJECT REVIEW

Constituent(s) to be measured	Allowable Limit(s)[1]		Rule or Permit Condition(s)	Sampling Location(s) (SCR inlet, outlet, exhaust, etc.)	Other Requirements (test parameters, BACT, Rule Development, etc.)
	Concentration (specify ppm as CH_4, @ 3% O_2, etc.)	Mass Emission (specify lb/hr, etc.)			
☒ TGNMO, Conc & Mass ☐ TGNMO, Efficiency (*check all that apply*): ☐ Transfer ☐ Capture/Collect ☐ Control/Destruct ☐ Overall	250 ppmvd	☒ Compliance Only ☐ Mass Emissions or Factors		Rule 1110.2	exhaust	Over sampling time
☐ Speciated Organics (*specify*):		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ PM (total)		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ PM (solid)		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ PM_{10}		☐ Compliance Only ☐ Mass Emissions or Factors				
☐ Toxics (*specify*):		☐ Compliance Only ☐ Mass Emissions or Factors				

1. Concentration must include correction to standard point-of-reference (NOx @ *3%*O_2, ROG *as* CH_4, etc.). If there is no "Mass Emission" compliance limit specified, please specify if concentration will be used only for compliance determination or whether it will also be calculated to a mass emission or factor (this will affect how we interpret the reported concentrations).

October 12, 2011

Maria Vibal - Air Quality Engineer
South Coast Air Quality Management District
21865 E. Copley Drive,
Diamond Bar, CA 91765-0830

Subject: **Compliance Source Test Reports for Beta Offshore OCS Lease Parcels – Beta Facility. Facility ID 166073 Platform Eureka East Crane (D89) and Center Crane (D90); Platform Ellen East Crane (D87) and Center Crane (D91); and Platform Elly East Crane (D92)**

Dear Ms. Vibal:

Enclosed is one copy of the subject Compliance Source Testing Report to comply with Section H Permit Conditions D28.1 and D29.3 as they apply to Devices D-87, D89, D90, D91 and D92, and with requirements under SCAQMD Rule 1110.2. The testing was conducted over a course of several days. Initially the testing was conducted on August 16, 17 and 18. However, when it was discovered that four of the crane engines failed the VOC or ROG portion of the test, the failing engines were placed out of service and retesting was scheduled as soon as practical, which was September 9 and 13. The report, completed by Almega Environmental, covers the passing components of the testing for both periods (August and September). This report was received by Beta Offshore on October 4, 2011.

RESULTS OF TESTING

The CO and VOC emissions concentrations of the engine were well below the corresponding concentration limits as specified in Rule 1110.2. Please refer to the summary page from the report (copy attached).

Should you have any questions or concerns, or need additional copies of the report, please contact me at (562) 683-3497.

Sincerely,

Marina Robertson
Beta Offshore
HSE Manager

Enclosure: Emission Testing of Five Internal Combustion Engines for CO and VOC under SCAQMD Rule 1110.2. (two volumes) - 1 copy

111 W. Ocean Blvd., Ste 1240 | Long Beach, CA 90802 | Office: 562-628-1526 | Fax: 562-628-1536

TABLE 1-1 SUMMARY OF RESULTS

Facility: **Beta Offshore**
City: **Long Beach, CA**
Source: **Cranes**

Parameter/Unit Tested	Device ID	Test Date	Carbon Monoxide (ppmv) 15 @ O2	TGNMO, as Methane (ppmv) 15 @ O2
Allowed Limits			2000 ppmv (Rule 1110.2)	250 ppmv (Rule 1110.2)
Ellen East Crane	D87			160
Low		08/17/11	480	
Mid		09/13/11	22.1	
High		08/17/11	278	
Eureka East Crane	D89			87.8
Low		08/16/11	222	
Mid		09/09/11	35.1	
High		08/16/11	70.7	
Eureka Center Crane	D90			91.9
Low		08/16/11	716	
Mid		09/13/11	36.7	
High		08/16/11	263	
Ellen Center Crane	D91			95.5
Low		08/17/11	721	
Mid		08/17/11	196	
High		08/17/11	170	
Elly East Crane	D92			81.3
Low		08/18/11	810	
Mid		09/09/11	32.7	
High		08/18/11	270	

Almega
ENVIRONMENTAL

SOURCE TEST REPORT

Emission Testing of Five Internal Combustion Engines for CO and VOC under SCAQMD Rule 1110.2.

Facility ID: 166073
Device ID: D87, D89, D90, D91 & D92

Prepared for:

Beta Offshore
111 West Ocean Blvd. Ste 1240
Long Beach, CA 90802

Equipment Location:

Beta Outer Continental Shelf (OCS) Platforms- Ellen/Elly and Eureka

Test Date(s): August 16-18 & September 9 & 13, 2011

Report Date: September 30, 2011

Project: 9164

Prepared by:

Almega Environmental & Technical Services
5251 McFadden Avenue
Huntington Beach, CA 92649

Prepared by & Title: Tulasi R. Gyawali, Quality Assurance Engineer

Reviewed by & Title: Charles M. Figueroa, Sr. Project Manager

1.0 EXECUTIVE SUMMARY

Key project information is provided in the summary below. Test results are summarized in Table 1-1.

Customer	Beta Offshore 111 W. Ocean Blvd. Ste 1240 Long Beach, CA 90802 Contact: Ms. Marina Robertson, tel. (562) 683-3497
Equipment Location	Beta Outer Continental Shelf (OCS) Platform- Ellen Located ~ nine miles west of Huntington Beach, California
Facility ID	166073
Equipment	Internal Combustion Engine (ICE)
Device ID Numbers	D87, D89, D90, D91, & D92
Test Objective	Measure concentrations of carbon monoxide (CO) and volatile organic compounds (VOCs) to demonstrate compliance with SCAQMD Rule 1110.2 (f) (1) (C)
Test Requested by	Ms. Marina Robertson of Beta Offshore
Test Date(s)	August 16-18 & September 9 & 13, 2011
Testing Firm	Almega Environmental & Technical Services 5251 McFadden Avenue Huntington Beach, CA 92649 Contact: Mr. Charles M. Figueroa, tel (714) 889-4000
Test Personnel	Charles Figueroa, Bryan Harrison, and Dorian Johnson of Almega Environmental & Technical Services
Regulatory Agency	South Coast Air Quality Management District (SCAQMD) 21865 East Copley Drive Diamond Bar, CA 91765-4182

TABLE 1-1 SUMMARY OF RESULTS

Facility: **Beta Offshore**
City: **Long Beach, CA**
Source: **Cranes**

Parameter/Unit Tested	Device ID	Test Date	Carbon Monoxide (ppmv) 15 @ O2	TGNMO, as Methane (ppmv) 15 @ O2
Allowed Limits			2000 ppmv (Rule 1110.2)	250 ppmv (Rule 1110.2)
Ellen East Crane	D87			160
Low		08/17/11	480	
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Eureka East Crane	D89			87.8
Low		08/16/11	222	
Mid		09/09/11	35.1	
High		08/16/11	70.7	
Eureka Center Crane	D90			91.9
Low		08/16/11	716	
Mid		09/13/11	36.7	
High		08/16/11	263	
Ellen Center Crane	D91			95.5
Low		08/17/11	721	
Mid		08/17/11	196	
High		08/17/11	170	
Elly East Crane	D92			81.3
Low		08/18/11	810	
Mid		09/09/11	32.7	
High		08/18/11	270	

TABLE 3.1 VOLATILE ORGANIC COMPOUNDS TEST RESULTS

Facility: Beta Offshore
City: Long Beach, CA
Source: Cranes

Parameter	units	Ellen East			Eureka East			Eureka Center			Ellen Center			Elly East		
		1A	1B	AVG	1A	1B	AVG	1A	1B	AVG	1A	1B	AVG	1A	1B	AVG
Run Data Test Date:	m/d/y	09/13/11			09/09/11			09/13/11			08/17/11			09/09/11		
Start Time:	hh:mm	14:52	14:52	**14:52**	15:49	15:49	**15:49**	10:59	10:59	**10:59**	12:42	12:42	**12:42**	**12:38**	**12:38**	**12:38**
End Time:	hh:mm	15:22	15:22	**15:22**	16:19	16:19	**16:19**	11:29	11:29	**11:29**	13:12	13:12	**13:12**	**13:08**	**13:08**	**13:08**
Sampling Method		25.1	25.1	**25.1**	25.1	25.1	**25.1**	25.1	25.1	**25.1**	25.1	25.1	**25.1**	25.1	25.1	**25.1**
Standard Temperature	deg. F	60	60	**60**	60	60	**60**	60	60	**60**	60	60	**60**	60	60	**60**
Stack Gas Parameters																
Barometric Pressure	in. Hg	30.02	30.02	**30.02**	29.76	29.76	**29.76**	30.02	30.02	**30.02**	29.97	29.97	**29.97**	29.82	29.82	**29.82**
O2 Content	%,dry	16.1	16.1	**16.1**	16.8	16.8	**16.8**	15.1	16.2	**15.7**	18.1	18.0	**18.1**	16.2	15.7	**16.0**
CO2 content	%,dry	3.90	3.90	**3.90**	3.20	3.20	**3.20**	3.60	3.80	**3.70**	2.10	1.80	**1.95**	3.80	4.20	**4.00**
TGNMO, as Methane *																
CONCENTRATION																
Measured as Methane	ppmv	32.2	130.8	** **131**	63.1	59.0	**61.0**	80.0	81.6	**80.8**	43.5	48.8	**46.2**	51.6	86.3	**68.9**
@15%O2 as Methane	ppmv@	39.6	160.7	** **161**	90.8	84.8	**87.8**	81.4	102.4	**91.9**	91.7	99.3	**95.5**	64.8	97.9	**81.3**

* corrected based on carbon number: Methane = 1

** Relative precision between runs is greater than 20%. Maximum result is reported.

TABLE 3.2 CARBON MONOXIDE TEST RESULTS

Facility: Beta Offshore
City: Long Beach, CA
Source: Cranes

Parameter	units	Ellen East			Eureka East			Eureka Center			Ellen Center			Elly East		
		Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High	Low	Mid	High
Run Data Test Date:	m/d/y	08/17/11	09/13/11	08/17/11	08/16/11	09/09/11	08/16/11	08/16/11	09/13/11	08/16/11	08/17/11	08/17/11	08/17/11	08/18/11	09/09/11	08/18/11
Start Time:	hh:mm	12:45	14:52	9:51	15:10	15:49	12:55	12:59	10:59	10:55	14:15	12:42	10:44	6:10	12:38	7:10
End Time:	hh:mm	13:01	15:22	10:21	15:40	16:19	13:25	13:29	11:29	11:25	14:45	13:12	11:14	6:40	13:08	7:40
Sampling Method		25.3	25.1	25.3	25.3	25.1	25.3	25.3	25.1	25.3	25.3	25.1	25.3	25.3	25.1	25.3
Standard Temperature	deg. F	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Stack Gas Parameters																
Barometric Pressure	in. Hg	29.97	30.02	29.97	29.90	29.76	29.90	29.90	30.02	29.90	29.97	29.97	29.97	29.91	29.82	29.91
O2 Content	%.dry	17.8	16.1	18.1	17.5	16.8	16.3	18.0	15.7	17.6	16.9	18.1	17.3	17.6	16.0	18.3
CO2 content	%.dry	2.00	3.90	1.80	2.00	3.20	2.40	2.30	3.70	2.50	2.70	1.95	2.40	2.00	4.00	1.60
Carbon Monoxide																
CONCENTRATION																
Measured	ppmv	252	18.0	132	128	24.4	55.1	352	31.9	147	489	94.5	104	453	27.2	119
@15%O2 Corrected	ppmv	480	22.1	278	222	35.1	70.7	716	36.7	263	721	196	170	810	32.7	270

* corrected based on carbon number: Methane = 1

Note: Mid is the average value of run 1A and 1B.

4.0 EQUIPMENT AND PROCESS DESCRIPTION

The Beta Offshore, Beta OCS Platforms Facility is an oil and gas production facility located on the Federal OCS approximately nine miles west of Huntington Beach. The facility consists of three fixed platform structures – Ellen, Elly, and Eureka. The oil and gas wells and some minor process equipments are located on Platforms Ellen and Eureka. The oil, gas, and water produced from the wells on Ellen and Eureka are transported via pipelines to Platform Elly for additional processing. The resulting oil product is shipped to shore via pipeline, the gas product is used on Platform Elly as fuel in turbines that generate electricity and drive pumps, and the water is re-injected in the oil reservoir via wells used exclusively for that purpose.

The equipment tested is described below.

4.1 Equipment Description

a) Ellen East Crane

The Internal Combustion Engine (ICE) at the Ellen East Crane is the Engine with device I. D. D87, Non-Emergency, L-11B, Detroit Diesel Model 1064-7001, with Oxidation Catalyst, Johnson Matthey Model JM P/N CXXO-S--8-4, and the Diesel fueled engine with the rating of 195 BHP.

b) Eureka East Crane

The Internal Combustion Engine (ICE) at the Eureka East Crane is the Engine with device I. D. D89, Non-Emergency, CR-010-A2, Detroit Diesel Model 1064-7001, with Oxidation Catalyst, Johnson Matthey Model JM P/N CXXO-S-8-4, and the Diesel fueled engine with the rating of 195 BHP.

c) Eureka East Crane

The Internal Combustion Engine (ICE) at the Eureka Center Crane is the Engine with device I. D. D90, Non-Emergency, CR-020-A2, Detroit Diesel Model 1064-7001, with Oxidation Catalyst, Johnson Matthey Model JM P/N CXXO-S-8-4, and the Diesel fueled engine with the rating of 195 BHP.

d) Ellen Center Crane

The Internal Combustion Engine (ICE) at the Ellen Center Crane is the Engine with device I. D. D91, Non-Emergency, L-11A, Detroit Diesel Model 1063-7008, with Oxidation Catalyst, Johnson Matthey Model JM P/N CXXO-S-8-4, and the Diesel fueled engine with the rating of 195 BHP.

e) Elly East Crane

The Internal Combustion Engine (ICE) at the Elly East Crane is the Engine with device I. D. D92, Non-Emergency, L-01A, Detroit Diesel Model 1064-7001, with Oxidation Catalyst, Johnson Matthey Model JM P/N CXXO-S-8-4, and the Diesel fueled engine with the rating of 195 BHP.

4.2 Operating Conditions during Test

The process was operated at normal operating conditions during the test period. The engine was operated at low, normal, and high during the sampling period.

Tested Source	Parameters							
	Test Date	Barometric Pressure (in. Hg)	Relative Humidity (%)	Ambient Temp. (°F)	Meter Operating Hours (h)	Exhaust Gas Temperature (°F)	Inlet Temperature (°F)	Load Rate, (lbs)
Ellen East Crane								
Low	08/17/11	29.97	65	73		451	433	3,000
Mid	09/13/11	30.02	53	76	6161.6	466	522	6,450
High	08/17/11	29.97	83	66		510	488	23,000
Eureka East Crane								
Low	08/16/11	29.90	65	73		400	380	3,000
Mid	09/09/11	29.97	66	72	1401.1	440	360	8,000
High	08/16/11	29.90	65	73		500	450	22,000
Eureka Center Crane								
Low	08/16/11	29.90	65	73		398	385	3,000
Mid	09/13/11	30.02	65	73	838.0	458	434	7,650
High	08/16/11	29.90	68	72		423	410	22,000
Ellen Center Crane								
Low	08/17/11	29.97	53	75		483	460	3,000
Mid	08/17/11	29.97	65	73	n/a	476	455	10,500
High	08/17/11	29.97	83	66		471	452	23,000
Elly East Crane								
Low	08/18/11	29.91	93	64		453	436	3,000
Mid	09/09/11	29.82	66	72	1787.1	400	424	6,500
High	08/18/11	29.91	93	64		429	407	16,000

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

June 1, 2011

Mr. Steve Liles
Executive VP and Chief Operating Officer
Beta Offshore
111 West Ocean Blvd., Suite 1240
Long Beach, CA 90802

Dear Mr. Liles:

Attached is the Section H of your RECLAIM/Title V Facility Permit (ID No. 166073) for the equipment located at OCS Lease Parcels P300/P301 (Federal Waters, off the coast of Huntington Beach), California. The facility permit reflects the inclusion of the following applications approved for permit to construct.

Sections H of the Facility Permit

Application No.	Equipment Description	Devices	Processes/System
517838	Internal Combustion, Crane Engine [Eureka Central]	D90	3/7
517839	Internal Combustion, Crane Engine [Eureka East]	D89	3/7
517840	Internal Combustion, Crane Engine [[Ellen East]	D87	3/6
517841	Internal Combustion, Crane Engine [Ellen Center]	D91	3/6
517842	Internal Combustion, Crane Engine [Elly East]	D92	3/8
517837	RECLAIM/Title V minor –FP-revision	Facility Permit Amendment	

Please review the entire Section H of your permit carefully. Any questions concerning items in your Facility Permit should be directed to Mr. Chandrashekhar S. Bhatt at (909) 396 – 2653.

Sincerely,

William C. Thompson
Senior Manager
Operation Unit
Engineering and Compliance Division

WT:RGC:csb
Attachments

cc: RECLAIM file 166073
RECLAIM Admin.
Ed Pupka, Compliance
EPA, Gerardo Rios

c:\Beta-517837-842-pc-epa-REV-OVER-fp-covr-ltr

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

FACILITY PERMIT TO OPERATE

BETA OFF SHORE
OCS LEASE PARCELS P300/P301
HUNTINGTON BEACH, CA 92648

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By
Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
System 4: ICE: RIG GENERATOR - PLATFORM ELLEN					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EJ-01B, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP WITH A/N: 516026 † Permit to Construct Issued: 10/14/10 GENERATOR, RIG, 600 KW	D82		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EJ-01C, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP WITH A/N: 516027 † Permit to Construct Issued: 10/14/10 GENERATOR, RIG, 600 KW	D83		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
System 5: ICE: RIG GENERATOR - PLATFORM EUREKA					

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device

FACILITY PERMIT TO OPERATE
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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EN-010-E2, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP WITH A/N: 516028 † Permit to Construct Issued: 10/14/10 GENERATOR, RIG, 600 KW	D84		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EN-020-E2, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP WITH A/N: 516029 † Permit to Construct Issued: 10/14/10 GENERATOR, RIG, 600 KW	D85		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EN-030-E2, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP A/N: 516030	D86		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
System 6: ICE: PEDESTAL CRANE - PLATFORM ELLEN					

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, L-11B, ELLEN EAST CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1064-7001, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S--8-4, 195 BHP A/N: 517840 Permit to Construct Issued: 05/31/11	D87		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, L-11A, ELLEN CENTER CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1063-7008, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S-8-4, 195 BHP A/N: 517841 Permit to Construct Issued: 05/31/11	D91		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1
System 7: ICE: PEDESTAL CRANE - PLATFORM EUREKA					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, CR-010-A2, EUREKA EAST CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1064-7001, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S-8-4, 195 BHP A/N: 517839 Permit to Construct Issued: 05/31/11	D89		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, CR-020-A2, EUREKA CENTER CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1064-7001, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S-8-4, 195 BHP A/N: 517838 Permit to Construct Issued: 05/31/11	D90		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1
System 8: ICE: PEDESTAL CRANE - PLATFORM ELLY					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, L-01A, ELLY EAST CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1064-7001, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S-8-4, 195 BHP A/N: 517842 Permit to Construct Issued: 05/31/11	D92		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: DEVICE ID INDEX

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.

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SECTION H: DEVICE ID INDEX

Device Index For Section H			
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D85	2	3	5
D86	2	3	5
D87	3	3	6
D89	3	3	7
D90	4	3	7
D91	3	3	6
D92	4	3	8

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F2.1 The operator shall limit emissions from this facility as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 14337 LBS IN ANY ONE DAY
PM	Less than or equal to 1292 LBS IN ANY ONE DAY
ROG	Less than or equal to 3251 LBS IN ANY ONE DAY
SOX	Less than or equal to 532 LBS IN ANY ONE DAY
NOX	Less than or equal to 2017 LBS IN ANY ONE DAY

For the purpose of this condition, the CO emission limit shall be the maximum daily potential to emit which also includes emissions from the platform support vessels.

For the purpose of this condition, the PM emission limit shall be the maximum daily potential to emit which also includes emissions from the platform support vessels.

For the purpose of this condition, the ROG emission limit shall be the maximum daily potential to emit which also includes emissions from the platform support vessels and the fugitive sources.

For the purpose of this condition, the SOx emission limit shall be the maximum daily potential to emit which also includes emissions from the platform support vessels.

For the purpose of this condition, the NOx emission limit shall be the maximum daily potential to emit from the flares, work and crew boats only.

[RULE 1183, 3-12-1993]

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 11-9-2001]

F14.1 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

[RULE 431.2, 9-15-2000]

F14.2 The operator shall not purchase diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

The MSDS shall be made available to AQMD upon request

[RULE 431.2, 9-15-2000]

F16.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

platform support vessels operating hours

support vessels fuel type and usage

date and time of operation of support vessels

activity associated with vessels operation

[RULE 1183, 3-12-1993]

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

PROCESS CONDITIONS

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[RULE 1173, 6-1-2007]

[Processes subject to this condition : 2, 4, 5]

SYSTEM CONDITIONS

S13.1 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[RULE 1173, 6-1-2007]

[Systems subject to this condition : Process 1, System 1 , 2 , 3 , 7 , 8]

DEVICE CONDITIONS

A. Emission Limits

A63.6 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

CO	Less than or equal to 171.4 LBS PER DAY
PM	Less than or equal to 8.4 LBS PER DAY
ROG	Less than or equal to 33.7 LBS PER DAY
SOX	Less than or equal to 1.8 LBS PER DAY

[RULE 1303(b)(2)-Offset, 12-6-2002; **40CFR 55 OCS, 9-4-1992**]

[Devices subject to this condition : D87, D89, D90, D91, D92]

A63.9 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 794.6 LBS PER DAY
PM	Less than or equal to 38.8 LBS PER DAY
ROG	Less than or equal to 156.4 LBS PER DAY
SOX	Less than or equal to 8.2 LBS PER DAY

[RULE 1303(b)(2)-Offset, 12-6-2002; **40CFR 55 OCS, 9-4-1992**]

[Devices subject to this condition : D82, D83, D84, D85, D86]

C. Throughput or Operating Parameter Limits

C1.3 The operator shall limit the operating time to no more than 500 hour(s) in any one year.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The purpose(s) of this condition is to exempt the engine from the VOC limit of 30 ppmvd and the CO limit of 250 ppmvd, both corrected to 15% O2, effective 7/1/2011, pursuant to Rule 1110.2(d)(1)(B)(ii).

The engine shall emit no more than 250 ppmvd of VOC and 2000 ppmvd of CO, both corrected to 15% O2.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the equipment.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D87, D89, D90, D91, D92]

D. Monitoring/Testing Requirements

D12.4 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the oxidation catalyst.

The temperature of the engine exhaust at the inlet of the catalyst shall be between 480 and 1380 degrees F, inclusive.

The temperature range requirement of this condition shall not apply during start-up operations of the engine not to exceed 30 minutes per start-up.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D87, D89, D90, D91, D92]

D12.6 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the oxidization catalyst.

FACILITY PERMIT TO OPERATE
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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The temperature of the engine exhaust at the inlet of the catalyst shall be between 465 and 1250 degrees F, inclusive.

The temperature range requirement of this condition shall not apply during start-up operations of the engine not to exceed 30 minutes per start-up.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D82, D83, D84, D85, D86]

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted to determine the VOC emissions at the outlet.

The test shall be conducted to determine the CO emissions at the outlet.

The test shall be conducted in compliance with the source testing requirements of Rule 1110.2(f)(1)(C).

The test shall be conducted in accordance with an AQMD approved protocol.

The test shall be conducted to demonstrate compliance with Rule 1110.2.

[RULE 1110.2, 2-1-2008; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

D29.2 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Location
VOC emissions	District Method 25.3	District-approved averaging time	Outlet

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

CO emissions	District method 100.1	District-approved averaging time	Outlet

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after the permit to construct is issued. The AQMD shall be notified of the date and time of the test at least 30 days prior to the test.

The test shall be conducted in accordance with an AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 60 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the name, address and phone number of the engine operator and a District-approved source testing contractor that will conduct the test, the application and permit number(s), emission limits, a description of the engine(s)

to be tested, the test methods and procedures to be used, the number of tests to be conducted and under what loads, the required minimum sampling time for the VOC test based on the analytical detection limit and expected VOC levels, and a description of the parameters to be measured in accordance with the I&M plan required by the Rule 1110.2(f)(1)(D).

The test shall be conducted in accordance with the source testing requirements of Rule 1110.2(f)(1)(C).

The test shall be conducted for compliance verification of the 30 ppmvd VOC limit.

The test shall be conducted for compliance verification of the 250 ppmvd CO limit.

The source test report shall be submitted to the District within 60 days after the test has been conducted.

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86]

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D29.3 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Location
VOC emissions	District method 25.1	District-approved averaging time	Outlet

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after initial start-up. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (gal/hr) and the flue gas flow rate.

The test shall be conducted in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The operator may use a previously approved source test protocol for the test, but include a copy of the protocol in the source test report. The test protocol shall include the proposed operating conditions of the engine during the tests,

the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted per Rule 1110.2 (f)(1)(C) as adopted on 2/1/2008.

The test shall be conducted for compliance verification of the 250 ppmvd limit for VOC.

The source test report shall be submitted to the District within 45 days after the test has been conducted.

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D87, D89, D90, D91, D92]

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D323.3 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a quarterly basis, at least, unless the equipment did not operate during the entire quarterly period. The routine quarterly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or

2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

1). Stack or emission point identification;

2). Description of any corrective actions taken to abate visible emissions;

3). Date and time visible emission was abated; and

4). All visible emission observation records by operator or a certified smoke reader.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

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The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

E. Equipment Operation/Construction Requirements

E193.1 The operator shall construct, operate, and maintain this equipment according to the following requirements:

The operator shall install and maintain an engine backpressure gauge to accurately indicate the engine backpressure.

The engine backpressure shall not exceed 44 inches water column.

The catalyst shall be cleaned or replaced if the engine backpressure exceeds the recommended limit.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D87, D89, D90, D91, D92]

E193.2 The operator shall construct, operate, and maintain this equipment according to the following requirements:

The engine shall install and maintain an engine backpressure gauge to accurately indicate the engine backpressure.

The engine backpressure shall not exceed 27 inches water column.

The catalyst shall be cleaned or replaced if the engine backpressure exceeds the recommended limit.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D82, D83, D84, D85, D86]

E448.2 The operator shall comply with the following requirements:

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Maintain a quarterly engine operating log that includes:

A. Total hours of operation;

B. Type of liquid fuel;

C. Fuel consumption (gallons of liquid); and

D. Cumulative hours of operation since the last source test required in Rule 1110.2(f)(1)(C).

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D87, D89, D90, D91, D92]

E448.3 The operator shall comply with the following requirements:

Maintain a monthly engine operating log that includes:

A. Total hours of operation;

B. Type of liquid fuel;

C. Fuel consumption (gallons of liquid); and

D. Cumulative hours of operation since the last source test required in Rule 1110.2(f)(1)(C).

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86]

E448.4 The operator shall comply with the following requirements:

The operator shall comply with the requirements of the Inspection and Monitoring (I&M) plan.

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The operator shall comply with the terms and conditions set forth below:

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

E448.5 The operator shall comply with the following requirements:

The operator shall comply with the reporting requirements of Rule 1110.2(f)(1)(H) pertaining to any equipment breakdown that results in emissions in excess of rule or permit emission limits for VOC or CO.

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

H. Applicable Rules

H23.7 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
CO	District Rule	1110.2
VOC	District Rule	1110.2

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

K. Record Keeping/Reporting

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen, dry basis.

[RULE 1110.2, 2-1-2008; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
System 4: ICE: RIG GENERATOR - PLATFORM ELLEN					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EJ-01B, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP WITH A/N: 516026 † Permit to Construct Issued: 10/14/10 GENERATOR, RIG, 600 KW	D82		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EJ-01C, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP WITH A/N: 516027 † Permit to Construct Issued: 10/14/10 GENERATOR, RIG, 600 KW	D83		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
System 5: ICE: RIG GENERATOR - PLATFORM EUREKA					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EN-010-E2, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP WITH A/N: 516028 † Permit to Construct Issued: 10/14/10 GENERATOR, RIG, 600 KW	D84		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

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The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EN-020-E2, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP WITH A/N: 516029 † Permit to Construct Issued: 10/14/10 GENERATOR, RIG, 600 KW	D85		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, EN-030-E2, DIESEL FUEL, CATERPILLAR, MODEL D398PCTA, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL BX-70-D-8, WITH AFTERCOOLER, TURBOCHARGER, 853 BHP A/N: 516030	D86		NOX: LARGE SOURCE**	**CO**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 450 PPMV DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 30 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.9, D12.6, D28.1, D29.2, D323.3, E193.2, E448.3, E448.4, E448.5, H23.7, K40.1
System 6: ICE: PEDESTAL CRANE- PLATFORM ELLEN					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, L-11B, ELLEN EAST CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1064-7001, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S--8-4, 195 BHP A/N: 517840	D87		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

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The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, L-11A, ELLEN CENTER CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1063-7008, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S-8-4, 195 BHP A/N: 517841	D91		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1
System 7: ICE: PEDESTAL CRANE - PLATFORM EUREKA					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, CR-010-A2, EUREKA EAST CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1064-7001, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S-8-4, 195 BHP A/N: 517839	D89		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, CR-020-A2, EUREKA CENTER CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1064-7001, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S-8-4, 195 BHP A/N: 517838	D90		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1
System 8: ICE: PEDESTAL CRANE - PLATFORM ELLY					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, L-01A, ELLY EAST CRANE, DIESEL FUEL, DETROIT DIESEL, MODEL 1064-7001, WITH OXIDATION CATALYST, JOHNSON MATTHEY, MODEL JM P/N CXXO-S-8-4, 195 BHP A/N: 517842	D92		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) [RULE 1110.2, 2-1-2008]; **NOX**: 469 LBS/1000 GAL DIESEL (3) **[RULE 2012, 5-6-2005]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **VOC**: 250 PPMV (5) [RULE 1110.2, 2-1-2008]	A63.6, C1.3, D12.4, D28.1, D29.3, D323.3, E193.1, E448.2, E448.4, E448.5, H23.7, K40.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

† This permit to construct was issued to the previous operator at a prior date. The equipment was constructed and the permit was subsequently transferred to this operator.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: DEVICE ID INDEX

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D82	1	3	4
D83	1	3	4
D84	1	3	5
D85	2	3	5
D86	2	3	5
D87	2	3	6
D89	3	3	7
D90	3	3	7
D91	3	3	6
D92	3	3	8

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F2.1 The operator shall limit emissions from this facility as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 14337 LBS IN ANY ONE DAY
PM	Less than or equal to 1292 LBS IN ANY ONE DAY
ROG	Less than or equal to 3251 LBS IN ANY ONE DAY
SOX	Less than or equal to 532 LBS IN ANY ONE DAY
NOX	Less than or equal to 2017 LBS IN ANY ONE DAY

For the purpose of this condition, the CO emission limit shall be the maximum daily potential to emit which also includes emissions from the platform support vessels.

For the purpose of this condition, the PM emission limit shall be the maximum daily potential to emit which also includes emissions from the platform support vessels.

For the purpose of this condition, the ROG emission limit shall be the maximum daily potential to emit which also includes emissions from the platform support vessels and the fugitive sources.

For the purpose of this condition, the SOx emission limit shall be the maximum daily potential to emit which also includes emissions from the platform support vessels.

For the purpose of this condition, the NOx emission limit shall be the maximum daily potential to emit from the flares, work and crew boats only.

[RULE 1183, 3-12-1993]

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 11-9-2001]

F14.1 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

[RULE 431.2, 9-15-2000]

F14.2 The operator shall not purchase diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

The MSDS shall be made available to AQMD upon request

[RULE 431.2, 9-15-2000]

F16.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

platform support vessels operating hours

support vessels fuel type and usage

date and time of operation of support vessels

activity associated with vessels operation

[RULE 1183, 3-12-1993]

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

PROCESS CONDITIONS

P13.1 All devices under this process are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[RULE 1173, 6-1-2007]

[Processes subject to this condition : 2, 4, 5]

SYSTEM CONDITIONS

S13.1 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[RULE 1173, 6-1-2007]

[Systems subject to this condition : Process 1, System 1 , 2 , 3 , 7 , 8]

DEVICE CONDITIONS

A. Emission Limits

A63.6 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

CO	Less than or equal to 171.4 LBS PER DAY
PM	Less than or equal to 8.4 LBS PER DAY
ROG	Less than or equal to 33.7 LBS PER DAY
SOX	Less than or equal to 1.8 LBS PER DAY

[RULE 1303(b)(2)-Offset, 12-6-2002; **40CFR 55 OCS, 9-4-1992**]

[Devices subject to this condition : D87, D89, D90, D91, D92]

A63.9 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 794.6 LBS PER DAY
PM	Less than or equal to 38.8 LBS PER DAY
ROG	Less than or equal to 156.4 LBS PER DAY
SOX	Less than or equal to 8.2 LBS PER DAY

[RULE 1303(b)(2)-Offset, 12-6-2002; **40CFR 55 OCS, 9-4-1992**]

[Devices subject to this condition : D82, D83, D84, D85, D86]

C. Throughput or Operating Parameter Limits

C1.3 The operator shall limit the operating time to no more than 500 hour(s) in any one year.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The purpose(s) of this condition is to exempt the engine from the VOC limit of 30 ppmvd and the CO limit of 250 ppmvd, both corrected to 15% O2, effective 7/1/2011, pursuant to Rule 1110.2(d)(1)(B)(ii).

The engine shall emit no more than 250 ppmvd of VOC and 2000 ppmvd of CO, both corrected to 15% O2.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the equipment.

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D87, D89, D90, D91, D92]

D. Monitoring/Testing Requirements

D12.4 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the oxidation catalyst.

The temperature of the engine exhaust at the inlet of the catalyst shall be between 480 and 1380 degrees F, inclusive.

The temperature range requirement of this condition shall not apply during start-up operations of the engine not to exceed 30 minutes per start-up.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D87, D89, D90, D91, D92]

D12.6 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the oxidization catalyst.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The temperature of the engine exhaust at the inlet of the catalyst shall be between 465 and 1250 degrees F, inclusive.

The temperature range requirement of this condition shall not apply during start-up operations of the engine not to exceed 30 minutes per start-up.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D82, D83, D84, D85, D86]

D28.1 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted to determine the VOC emissions at the outlet.

The test shall be conducted to determine the CO emissions at the outlet.

The test shall be conducted in compliance with the source testing requirements of Rule 1110.2(f)(1)(C).

The test shall be conducted in accordance with an AQMD approved protocol.

The test shall be conducted to demonstrate compliance with Rule 1110.2.

[RULE 1110.2, 2-1-2008; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

D29.2 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Location
VOC emissions	District Method 25.3	District-approved averaging time	Outlet
CO emissions	District method 100.1	District-approved averaging time	Outlet

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after the permit to construct is issued. The AQMD shall be notified of the date and time of the test at least 30 days prior to the test.

The test shall be conducted in accordance with an AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 60 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the name, address and phone number of the engine operator and a District-approved source testing contractor that will conduct the test, the application and permit number(s), emission limits, a description of the engine(s)

to be tested, the test methods and procedures to be used, the number of tests to be conducted and under what loads, the required minimum sampling time for the VOC test based on the analytical detection limit and expected VOC levels, and a description of the parameters to be measured in accordance with the I&M plan required by the Rule 1110.2(f)(1)(D).

The test shall be conducted in accordance with the source testing requirements of Rule 1110.2(f)(1)(C).

The test shall be conducted for compliance verification of the 30 ppmvd VOC limit.

The test shall be conducted for compliance verification of the 250 ppmvd CO limit.

The source test report shall be submitted to the District within 60 days after the test has been conducted.

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86]

D29.3 The operator shall conduct source test(s) for the pollutant(s) identified below.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Location
VOC emissions	District method 25.1	District-approved averaging time	Outlet

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after initial start-up. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (gal/hr) and the flue gas flow rate.

The test shall be conducted in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The operator may use a previously approved source test protocol for the test, but include a copy of the protocol in the source test report. The test protocol shall include the proposed operating conditions of the engine during the tests,

the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted per Rule 1110.2 (f)(1)(C) as adopted on 2/1/2008.

The test shall be conducted for compliance verification of the 250 ppmvd limit for VOC.

The source test report shall be submitted to the District within 45 days after the test has been conducted.

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D87, D89, D90, D91, D92]

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D323.3 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a quarterly basis, at least, unless the equipment did not operate during the entire quarterly period. The routine quarterly inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or

2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

1). Stack or emission point identification;

2). Description of any corrective actions taken to abate visible emissions;

3). Date and time visible emission was abated; and

4). All visible emission observation records by operator or a certified smoke reader.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

E. Equipment Operation/Construction Requirements

E193.1 The operator shall construct, operate, and maintain this equipment according to the following requirements:

The operator shall install and maintain an engine backpressure gauge to accurately indicate the engine backpressure.

The engine backpressure shall not exceed 44 inches water column.

The catalyst shall be cleaned or replaced if the engine backpressure exceeds the recommended limit.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D87, D89, D90, D91, D92]

E193.2 The operator shall construct, operate, and maintain this equipment according to the following requirements:

The engine shall install and maintain an engine backpressure gauge to accurately indicate the engine backpressure.

The engine backpressure shall not exceed 27 inches water column.

The catalyst shall be cleaned or replaced if the engine backpressure exceeds the recommended limit.

[RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D82, D83, D84, D85, D86]

E448.2 The operator shall comply with the following requirements:

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Maintain a quarterly engine operating log that includes:

A. Total hours of operation;

B. Type of liquid fuel;

C. Fuel consumption (gallons of liquid); and

D. Cumulative hours of operation since the last source test required in Rule 1110.2(f)(1)(C).

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D87, D89, D90, D91, D92]

E448.3 The operator shall comply with the following requirements:

Maintain a monthly engine operating log that includes:

A. Total hours of operation;

B. Type of liquid fuel;

C. Fuel consumption (gallons of liquid); and

D. Cumulative hours of operation since the last source test required in Rule 1110.2(f)(1)(C).

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86]

E448.4 The operator shall comply with the following requirements:

The operator shall comply with the requirements of the Inspection and Monitoring (I&M) plan.

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

E448.5 The operator shall comply with the following requirements:

The operator shall comply with the reporting requirements of Rule 1110.2(f)(1)(H) pertaining to any equipment breakdown that results in emissions in excess of rule or permit emission limits for VOC or CO.

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

H. Applicable Rules

H23.7 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
CO	District Rule	1110.2
VOC	District Rule	1110.2

[RULE 1110.2, 2-1-2008]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

K. Record Keeping/Reporting

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:

FACILITY PERMIT TO OPERATE
BETA OFF SHORE

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

Emission data shall be expressed in terms of concentration (ppmv), corrected to 15 percent oxygen, dry basis.

[RULE 1110.2, 2-1-2008; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D82, D83, D84, D85, D86, D87, D89, D90, D91, D92]

SCAQMD PERMIT PROCESSING SYSTEM (PPS)

AEIS DATA SHEET

Company Name : BETA OFF SHORE

Facility ID : 166073

Equipment Address : OCS LEASE PARCELS P300/P301

HUNTINGTON BEACH CA 92648

Application Number : 517840

Equipment B-Cat : 040901

Estimated Completion Date : 05/31/11

Equipment C-Cat :

Equipment Type : Basic

Equipment Description : I C E (50-500 HP) N-EM STAT DIESEL

	Emissions	
Emittants	R1 LB/HR	R2 LB/HR
CO	0.02	0.02
NOX	0.20	0.20
PM10	0.01	0.01
ROG	0.01	0.01

Applicable Rules

1110.2	02/01/2008	Emissions from Gaseous-and Liquid-fueled Engines
1148.1	03/05/2004	Oil and Gas Production Wells
1183	03/12/1993	Outer Continental Shelf (OCS) Air Regulations
2012	05/06/2005	Requirements of MRR for NOx Emissions (RECLAIM)
401	11/09/2001	Visible Emissions
402	05/07/1976	Nuisance
404	02/07/1986	Particulate Matter - Concentration
431.2	09/15/2000	Sulfur Content of Liquid Fuels

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Daily Start Times :	08:00	08:00	08:00	08:00	08:00	08:00	08:00
Daily Stop Times :	09:40	09:40	09:40	09:40	09:40	09:40	09:40

User's Initials : CB05 Date: 05/31/11 Supervisor's Name : _____ Review Date : / /

N S R D A T A S U M M A R Y S H E E T

Application No:	517840
Application Type:	Alteration/Modification
Application Status:	PENDAPPRV
Previous Apps,Dev,Permit #:	516031, 0 - , NONE

Company Name:	BETA OFF SHORE
Company ID:	166073
Address:	OCS LEASE PARCELS P300/P301,HUNTINGTON BEA
RECLAIM:	NOX
RECLAIM Zone:	01
Air Basin:	SC
Zone:	18
Title V:	YES

Device ID:	0 -
Estimated Completion Date:	05-31-2011
Heat Input Capacity:	0 Million BTU/hr
Priority Reserve:	NONE - No Priority Access Requested
Recommended Disposition:	25 - PERMIT TO CONSTRUCT GRANTED
PR Expiration:	
School Within 1000 Feet:	NO
Operating Weeks Per Year:	52
Operating Days Per Week:	7
Monday Operating Hours:	08:00 to 09:40
Tuesday Operating Hours:	08:00 to 09:40
Wednesday Operating Hours:	08:00 to 09:40
Thursday Operating Hours:	08:00 to 09:40
Friday Operating Hours:	08:00 to 09:40
Saturday Operating Hours:	08:00 to 09:40
Sunday Operating Hours:	08:00 to 09:40

Emittant: CO
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: 0
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0.04 lbs/hr
Max Daily: 0.06 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 0.04 lbs/hr
Max Daily: 0.06 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 0 lbs/day
Annual Emission: 20.38 lbs/yr
District Exemption: None

Emittant: NOX
BACT:
Cost Effectiveness: NO
Source Type: MAJOR
Emis Increase: 0
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0.2 lbs/hr
Max Daily: 0.28 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 0.2 lbs/hr
Max Daily: 0.28 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 0 lbs/day
Annual Emission: 101.92 lbs/yr
District Exemption: None

Emittant: PM10
BACT:
Cost Effectiveness: NO
Source Type: MINOR
Emis Increase: 0
Modeling: N/A
Public Notice: N/A
CONTROLLED EMISSION
Max Hourly: 0.01 lbs/hr
Max Daily: 0.01 lbs/day
UNCONTROLLED EMISSION
Max Hourly: 0.01 lbs/hr
Max Daily: 0.01 lbs/day
CURRENT EMISSION
BACT 30 days Avg: 0 lbs/day
Annual Emission: 5.1 lbs/yr
District Exemption: None

Emittant:	ROG
BACT:	
Cost Effectiveness:	NO
Source Type:	MINOR
Emis Increase:	0
Modeling:	N/A
Public Notice:	N/A
CONTROLLED EMISSION	
Max Hourly:	0.01 lbs/hr
Max Daily:	0.02 lbs/day
UNCONTROLLED EMISSION	
Max Hourly:	0.02 lbs/hr
Max Daily:	0.03 lbs/day
CURRENT EMISSION	
BACT 30 days Avg:	0 lbs/day
Annual Emission:	6.07 lbs/yr
District Exemption:	None

SUPERVISOR'S APPROVAL: _____ SUPERVISOR'S REVIEW DATE: _____

Processed By: chandrab 5/31/2011 12:15:44 PM

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION EVALUATION AND CALCULATIONS	No. of Pages 6	Page No. 1
	App. No. 517837-842	Date May 31, 11
	Evaluated by: C. S. Bhatt	Operation Team O

PERMIT TO CONSTRUCT

OWNER/OPERATOR: Beta Offshore

CONTACT: Ms. Marina Robertson

COMPANY ID: 104017

EQUIPMENT LOCATION: OCS Lease Parcels P300/P301
Huntington Beach, CA 92648

EQUIPMENT DESCRIPTION:

A/N 517838 - 842[Permit to Construct]

Beta has proposed to add oxidation catalyst to five crane engines [Devices D87, D89-D92] located on the platform Beta to reduce VOC emissions per requirements of R-1110.2 (d)(1)(B)(ii).

A/N 517837 [Facility permit amendment per above engines' modifications]

Section H: Permit to Construct and Temporary Permit to OPerate

Process 3: Internal Combustion Engines
System 6: ICE: Pedestal Crane - Platform Ellen

DESCRIPTION	ID No.	Connected to	Source Type/ Monitoring Unit	Emissions and Requirements	Equipment Specific Condition
Internal Combustion Engine, Non-Emergency, L-11B, Diesel Fuel, Detroit Diesel, Model 1064-7001, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4,** Ellen East Crane, 195 BHP, A/N ~~516031~~ 517840	D87		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3,** D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1
Internal Combustion Engine, Non-Emergency, L-11A, Diesel Fuel, Detroit Diesel, Model 1063-7008, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4,** Ellen Center Crane, 195 BHP, A/N ~~516032~~ 517841	D91		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3,** D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1

Section H: Permit to Construct and Temporary Permit to OPerate

Process 3: Internal Combustion Engines System 7: ICE: Pedestal Crane - Platform Eureka					
DESCRIPTION	ID No.	Connected to	Source Type/ Monitoring Unit	Emissions and Requirements	Equipment Specific Condition
Internal Combustion Engine, Non-Emergency, CR-010-A2, Diesel Fuel, Detroit Diesel, Model 1064-7001, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4**, Eureka East Crane, 195 BHP, A/N ~~516033~~ 517839	D89		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3**, D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1
Internal Combustion Engine, Non-Emergency, CR-020-A2, Diesel Fuel, Detroit Diesel, Model 1064-7001, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4**, Eureka Center Crane, 195 BHP, A/N ~~516035~~ 517838	D90		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3**, D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1
System 8: ICE: Pedestal Crane - Platform Elly					
Internal Combustion Engine, Non-Emergency, L-01A, Diesel Fuel, Detroit Diesel, Model 1064-7001, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4**, Elly East Crane, 195 BHP, A/N ~~516036~~ 517842	D92		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3**, D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1

A/N 517837 [Facility Permit Amendment]

This application will be processed for the amendment of Beta's facility's permit as per the above proposed modifications.

BACKGROUND:

Beta Offshore recently acquired this offshore facility from Pacific Energy and operates the OCS oil/gas production facility consisting of three offshore platforms – Elly, Ellen, and Eureka. The facility is located on the federal OCS, approximately 9 miles offshore of Huntington Beach. The oil and gas wells and few minor equipment are located on Platform Ellen and Eureka. The oil/gas/water produced form the wells on Ellen and Eureka are transported via subsea pipelines to Platform Elly for additional processing. The produced oil is shipped to the shore by subsea pipeline to the on shore receiving facility. The natural gas produced is used on platform Elly as fuel for electrical power generating turbines. Platform's total power demand is met by these turbines which are dual fuel and also operate on diesel. The produced water is re-injected into the reservoir.

Beta is a RECLAIM/Title V facility and is in Cycle 1. The change of ownership permit [Pacific Energy to Beta] was issued on 3/15/20211. Beta has filed the above 5 crane engines' applications to add the oxidation catalyst [from Johnson Matthey] to comply with VOC emission requirements (250 ppmv) of R-1110.2 (d)(1)(B)(ii) as amended on 2/1/2008. As per catalyst manufacturer, this catalyst will reduce VOC emissions by at least 70% and CO emissions by at least 80%. These are Class 1 applications and P/Cs will be issued to verify the VOC emission by source testing.

A/N 517837 is filed to amend the facility permit by above proposed changes and, per R-3000(b)(12) this is a minor T-V permit revision. ***This P/C evaluation was sent to EPA's 45-day review process as required by Rule-3003(j) on April 12, 2011***

PROCESS DESCRIPTION:

The crane engines are used to move equipment around the platforms, transport equipment, material, supplies, waste, and personnel from crew boats and service boats to and from the platform. The cranes are also used to deploy boat for safety and environmental drill. These cranes operate at about 50% load on an as needed basis and will not operate for more than 500 hrs/yr.

EMISSION CALCULATIONS:

The crane engines emissions are per the existing permit except the VOC emissions will be reduced by 70% due to the addition of the oxidation catalyst. Devices D87, D89, D90 and D92 are identical (same model number. Device D91 has a different model number but emissions are the same as HP rating is the same.

A/N	CO		NOx		PM_{10}		VOC, Pre-modif		Post Modif.		SOx	
	#/h	#/30-d	#/h	#/30-d	#/h	#/30-d	#/h	#/30-d	#/h	#/30-d	#/h	#/30-d
517838- 840, 842	0.04	0	0.2	0	0.01	0	0.02	0	0.006	0	0.002	0
517841	0.04	0	0.2	0	0.01	0	0.02	0	0.006	0	0.002	0

The above emissions are taken from the permit evaluations of A/NOs. 485759 [Vicky Lee's evaluation dated 6/2/10]. The VOC post modif. Emissions are 30% of pre-modif. emissions. The annual emissions = hourly emiss. x 500hrs/yr.

Toxic Air Contaminants'(TACs) Emissions:

Since there is a decrease in VOC emissions, toxic analysis is not done.

RULES EVALUATION:

CEQA: The applicant has filed the proper CEQA Form and per review of this form, CEQA process is not triggered.

Rule 212: Public notice is not required as the proposed modification [addition of VOC reduction catalyst] results in emission reduction.

Rule 301: Per rule, applicant has paid the proper filing fees of $12,719.72 for crane engines' modifications:

Rule 401: Visible Emissions:- With the proper operation of these engines, visible emissions are not expected.

Rule 402: Nuisance:- with proper operation, nuisance problems are not expected.

Rule 404: with clean burning diesel (15 ppm Sulfur content), PM emission will comply with the rule requirements..

Rule 405: The operation of the crane engine is not a process of loading any solid material. Thus, this rule is not applicable.

Rule 431.2: Diesel fuel supplied to this engine will comply with the rule requirements, FP condition F14.2.

Reg. X: This facility is not a major source of HAPs. Thus, national emission standards of hazardous air pollutants (NESHAP) are not applicable

Rule 1148.1: The produced gas is consumed by the facility's equipment. Thus, requirements of R-1148.1(d)(6) are met.

Rule 1110.2 The proposed modification [addition of the oxidation catalyst] to all the crane engines was done to reduce the VOC emissions to meet the rule requirements of 250 ppm[per rule amendment of 2/1/2008]. This will be verified by the source test. Since Beta is NOx RECLAIM facility, NOx emission compliance is not applicable as per R-2001, Table 1. Engine's CO and VOC emissions will comply with R-1110.2 (d)(B)(ii), Table II limits [CO = 2000 ppmv and VOC = 250 ppmv]. Permit condition, D28.1 will require these engines to be tested every 2 years for CO, NOx and VOC. Permit condition E448.4 will require Beta to have an I & M plan as required per rule sub section (f)(1)(D). These engines operates on an as needed basis and will not use more than 1 x 10^9 btu of fuel per year. Thus concentration limits effective on July 1, 2010 shall not apply.

Reg. XIII: The proposed addition of VOC and CO reduction catalyst will reduce both CO and VOC emissions and there shall be no increase of any other criteria pollutants. Thus, Reg XIII requirements are not triggered.

Rule 1401: the proposed modification to the crane engines reduces VOC emissions and consequently toxic emissions. Rule subpart (g)(1)(B) exempts a modification of a permit unit that causes reduction or no increase in cancer burden MICR or acute or chronic HIs at any receptor location.

Rule 1470: Rule Subpart (g)(10) provides that the requirements specified in paragraph (c)(2) through (c)(9) do not apply to diesel-fueled engines used solely on outer continental shelf (OCS) platforms located within 25 miles of California's seaward boundary.

Reg. XX: This is a NOx RECLAIM facility, however, the proposed modification has no impact on NOx emissions. Thus RECLAIM rules are not applicable.

Reg. XXX: Beta is a Title V facility, and applicant has submitted permit revision application (A/N 443083) as per requirement of R-3003 (b)(2). As the proposed modification is not expected to result in an emission increase of any RECLAIM pollutant or an increase in emissions of a pollutant subject to Reg. XIII or a hazardous air pollutant (HAP, and thus it is considered as minor permit revision pursuant to Rule 3000(b)(12)(A). This being a minor permit revision of facility's T-V permit, it is exempt from the public participation requirements of Rule 3006(b). The modified permit per proposed changes was submitted to EPA for a 45-day review period pursuant to R-3003(j) on April 12, 2011.

The revised Title V permit will now be issued as EPA's review period expired on May 27, 2011 and EPA did not provide any comments.

RECOMMENDATION AND PERMIT CONDITIONS:

The proposed modification to the crane engines meets the requirements of all applicable rules and regulations of the South Coast AQMD. A revised facility permit is recommended to Beta. Please see the draft facility permit for conditions.

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South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

April 12, 2011

Mr. Gerardo Rios
U.S. EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Rios:

The South Coast Air Quality Management District (AQMD) has received from Beta Offshore a Title V application, A/N 517837, for a "minor permit revision."

The modification under this minor permit revision includes the proposed alteration of 5 crane engines permits by the addition of the oxidation catalyst to reduce VOC emissions to meet Rule 1110.2 requirements.

The AQMD is required under Rule 3005(e) to provide a copy of the proposed permit to the EPA Administrator for a 45-day review. As such, a copy of the proposed revision to the existing Title V permit is attached along with our engineering analysis for your review. If you have any questions or wish to provide comments regarding this project, please call Mr. Chandrashekhar S. Bhatt (909) 396-2653 or Mr. Rob Castro (909) 396-2552.

Very truly yours,

William C. Thompson, P. E.
Senior Manager
Operation Unit
Engineering and Compliance

Attachments

cc: Ms. Marina Robertson
Beta Offshore
111 West Ocean Blvd., suite 1240
Long Beach, CA 90802

c:\Beta-Offshore-tv-minor-rev-517837-842-epa-covr-ltr

Certified Mail, Return Receipt Request

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION APPLICATION EVALUATION AND CALCULATIONS	No. of Pages 6	Page No. 1
	App. No. 517837-842	Date April 2, 11
	Evaluated by: C. S. Bhatt	Operation Team O

PERMIT TO CONSTRUCT

OWNER/OPERATOR: Beta Offshore

CONTACT: Ms. Marina Robertson

COMPANY ID: 104017

EQUIPMENT LOCATION: OCS Lease Parcels P300/P301
Huntington Beach, CA 92648

EQUIPMENT DESCRIPTION:

A/N 517838 [Permit to Construct]

Beta has proposed to add oxidation catalyst to five crane engines [Devices D87, D89-D92] located on the platform Beta to reduce VOC emissions per requirements of R-1110.2 (d)(1)(B)(ii).

A/N 517837 [Facility permit amendment per above engines' modifications]

Section H: Permit to Construct and Temporary Permit to OPerate

Process 3: Internal Combustion Engines System 6: ICE: Pedestal Crane - Platform Ellen					
DESCRIPTION	ID No.	Connected to	Source Type/ Monitoring Unit	Emissions and Requirements	Equipment Specific Condition
Internal Combustion Engine, Non-Emergency, L-11B, Diesel Fuel, Detroit Diesel, Model 1064-7001, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4,** Ellen East Crane, 195 BHP, A/N ~~516031~~ 517840	D87		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3,** D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1
Internal Combustion Engine, Non-Emergency, L-11A, Diesel Fuel, Detroit Diesel, Model 1063-7008, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4,** Ellen Center Crane, 195 BHP, A/N ~~516032~~ 517841	D91		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3,** D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1

Section H: Permit to Construct and Temporary Permit to OPerate

Process 3: Internal Combustion Engines System 7: ICE: Pedestal Crane - Platform Eureka					
DESCRIPTION	ID No.	Connected to	Source Type/ Monitoring Unit	Emissions and Requirements	Equipment Specific Condition
Internal Combustion Engine, Non-Emergency, CR-010-A2, Diesel Fuel, Detroit Diesel, Model 1064-7001, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4**, Eureka East Crane, 195 BHP, A/N ~~516033~~ 517839	D89		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3**, D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1
Internal Combustion Engine, Non-Emergency, CR-020-A2, Diesel Fuel, Detroit Diesel, Model 1064-7001, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4**, Eureka Center Crane, 195 BHP, A/N ~~516035~~ 517838	D90		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3**, D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1
System 8: ICE: Pedestal Crane - Platform Elly					
Internal Combustion Engine, Non-Emergency, L-01A, Diesel Fuel, Detroit Diesel, Model 1064-7001, **with Oxidation Catalyst, Johnson Matthey, Model JM P/N CXXO-S-8-4**, Elly East Crane, 195 BHP, A/N ~~516036~~ 517842	D92		NOx: Process Unit	CO: 2000 ppmv (5) [Rule 1110.2, 2-1-2008]; NOx: 469 lbs/1000 Gal, Diesel (1) [Rule 2012, 5-6-2005]; PM: (9) [Rule 404, 2-7-1986]; VOC: 250 ppmv (5) [Rule 1110.2, 2-1-2008]	A63.6, C1.3, D28.1, **D29.3**, D323.3, **E193.1**, E448.2, E448.4, E448.5, H23.7, K40.1

A/N 517837 [Facility Permit Amendment]

This application will be processed for the amendment of Beta's facility's permit as per the above proposed modifications.

BACKGROUND:

Beta Offshore recently acquired this offshore facility from Pacific Energy and operates the OCS oil/gas production facility consisting of three offshore platforms – Elly, Ellen, and Eureka. The facility is located on the federal OCS, approximately 9 miles offshore of Huntington Beach. The oil and gas wells and few minor equipment are located on Platform Ellen and Eureka. The oil/gas/water produced form the wells on Ellen and Eureka are transported via subsea pipelines to Platform Elly for additional processing. The produced oil is shipped to the shore by subsea pipeline to the on shore receiving facility. The natural gas produced is used on platform Elly as fuel for electrical power generating turbines. Platform's total power demand is met by these turbines which are duel fuel and also operate on diesel. The produced water is re-injected into the reservoir.

Beta is a RECLAIM/Title V facility and is in Cycle 1. The change of ownership permit [Pacific Energy to Beta] was issued on 3/15/20211. Beta has filed the above 5 crane engines' applications to add the oxidation catalyst [from Johnson Matthey] to comply with VOC emission requirements (250 ppmv) of R-1110.2 (d)(1)(B)(ii) as amended on 2/1/2008. As per catalyst manufacturer, this catalyst will reduce VOC emissions by at least 70% and CO emissions by at least 80%. These are Class 1 applications and P/Cs will be issued to verify the VOC emission by source testing.

A/N 517837 is filed to amend the facility permit by above proposed changes and, per R-3000(b)(12) this is a minor T-V permit revision.

PROCESS DESCRIPTION:

The crane engines are used to move equipment around the platforms, transport equipment, material, supplies, waste, and personnel from crew boats and service boats to and from the platform. The cranes are also used to deploy boat for safety and environmental drill. These cranes operate at about 50% load on an as needed basis and will not operate for more than 500 hrs/yr.

EMISSION CALCULATIONS:

The crane engines emissions are per the existing permit except the VOC emissions will be reduced by 70% due to the addition of the oxidation catalyst. Devices D87, D89, D90 and D92 are identical (same model number. Device D91 has a different model number but emissions are the same as Hp rating is the same.

A/N	CO		NOx		PM_{10}		VOC, Pre-modif		Post Modif.		SOx	
	#/h	#/30-d	#/h	#/30-d	#/h	#/30-d	#/h	#/30-d	#/h	#/30-d	#/h	#/30-d
517838, 839, 840, 842	0.04	0	0.2	0	0.01	0	0.02	0	0.006	0	0.002	0
517841	0.04	0	0.2	0	0.01	0	0.02	0	0.006	0	0.002	0

The above emissions are taken from the permit evaluations of A/NOs. 485759 [Vicky Lee's evaluation dated 6/2/10]. The VOC post modif. Emissions are 30% of pre-modif. emissions. The annual emissions = hourly emiss. x 500hrs/yr.

Toxic Air Contaminants'(TACs) Emissions:

Since there is a decrease in VOC emissions, toxic analysis is not done.

RULES EVALUATION:

CEQA: The applicant has filed the proper CEQA Form and per review of this form, CEQA process is not triggered.

Rule 212: Public notice is not required as the proposed modification [addition of VOC reduction catalyst] results in emission reduction.

Rule 301: Per rule, applicant has paid the following fees for crane engines' modifications:

A/Nos.	Fee		Comment
	Modification	XPP	----
517840	$2,094.60	$1,047.30	----
517838	$1,047.30	$523.65	Identical Equipment
517839	$1,047.30	$523.65	Identical Equipment
517840	$1,047.30	$523.65	Identical Equipment
517842	$2,094.60	1,047.30	---
517837	$1,723.07	---	RECALIM/T-V Amend.
Total	$9,054.17	$3,665.55	
Total Fee paid	$12,719.72		Regular + XPP

Rule 401: Visible Emissions:- With the proper operation of these engines, visible emissions are not expected.

Rule 402: Nuisance:- with proper operation, nuisance problems are not expected.

Rule 404: with clean burning diesel (15 ppm Sulfur content), PM emission will comply with the rule requiremtns..

Rule 405: The operation of the crane engine is not a process of loading any solid material. Thus, this rule is not applicable.

Rule 431.2: Diesel fuel supplied to this engine will comply with the rule requirements, FP condition F14.2.

Reg. X: This facility is not a major source of HAPs. Thus, national emission standards of hazardous air pollutants (NESHAP) are not applicable

Rule 1148.1: The produced gas is consumed by the facility's equipment. Thus, requirements of R-1148.1(d)(6) are met.

Rule 1110.2 The proposed modification [addition of the oxidation catalyst] to all the crane engines was done to reduce the VOC emissions to meet the rule requirements of 250 ppm[per rule amendment of 2/1/2008]. This will be verified by the source test. Since Beta is NOx RECLAIM facility, NOx emission compliance is not applicable as per R-2001, Table 1. Engine's CO and VOC emissions will comply with R-1110.2 (d)(B)(ii), Table II limits [CO = 2000 ppmv and VOC = 250 ppmv]. Permit condition, D28.1 will require these engines to be tested every 2 years for CO, NOx and VOC. Permit condition E448.4 will require Beta to have an I & M plan as required per rule sub section (f)(1)(D). These engines operates on an as needed basis and will not use more than 1×10^9 btu of fuel per year. Thus concentration limits effective on July 1, 2010 shall not apply.

Reg. XIII: The proposed addition of VOC and CO reduction catalyst will reduce both CO and VOC emissions and there shall be no increase of any other criteria pollutants. Thus, Reg XIII requirements are not triggered.

Rule 1401: the proposed modification to the crane engines reduces VOC emissions and consequently toxic emissions. Rule subpart (g)(1)(B) exempts a modification of a permit unit that causes reduction or no increase in cancer burden MICR or acute or chronic HIs at any receptor location.

Rule 1470: Rule Subpart (g)(10) provides that the requirements specified in paragraph (c)(2) through (c)(9) do not apply to diesel-fueled engines used solely on outer continental shelf (OCS) platforms located within 25 miles of California's seaward boundary.

Reg. XX: This is a NOx RECLAIM facility, however, the proposed modification has no impact on NOx emissions. Thus RECLAIM rules are not applicable.

Reg. XXX: Beta is a Title V facility, and the proposed modification is not expected to result in an emission increase of any RECLAIM pollutant or an increase in emissions of a pollutant subject to Reg. XIII or a hazardous air pollutant (HAP, and thus it is considered as minor permit revision pursuant to Rule 3000(b)(12)(A). This being a minor permit revision of facility's T-V permit, it is exempt from the public participation requirements of Rule 3006(b). The modified permit per proposed changes will be submitted to EPA for a 45-day review period pursuant to R-3003(j).

RECOMMENDATION AND PERMIT CONDITIONS:

The proposed modification to the crane engines meets the requirements of all applicable rules and regulations of the South Coast AQMD. A revised facility permit will be issued to Beta if EPA has has objection within the review period. Please see the draft facility permit for conditions.

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December 28, 2010

Mr. C. S. Bhatt
Air Quality Engineer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Applications to Modify Five Internal Combustion Engines:
- **Platform Ellen Crane Engines D87 and D91**
- **Platform Eureka Crane Engines D89, and D90**
- **Platform Elly Crane Engine D92**

Beta Offshore - Beta OCS Platforms Facility (ID 166073)

Dear Chandra:

Beta Offshore wishes to obtain permits to modify five (four of which are identical) diesel-fueled internal combustion engines at the subject facility by installing a diesel oxidation catalyst to reduce VOC emissions.

These applications are being submitted to enable timely installation of the oxidation catalysts if it is determined they are needed to achieve compliance with the Rule 1110.2 VOC emission limit of 250 ppmv. Some of the applications (or Permits to Construct) may be cancelled if source testing prior to installing the catalysts successfully demonstrates compliance with this emission limit. In recent (November 2010) source testing, two of the engines (D87 and D90) did not successfully demonstrate compliance with this emission limit. These two engines will not be operated until either (1) a retest successfully demonstrates compliance or (2) an oxidation catalyst is installed after obtaining a Permit to Construct. Engines D89 and D92 will be source tested in 2011 and D91 is due for testing in 2012.

The proposed diesel oxidation catalyst is a Johnson Matthey Model JM P/N CXXO-S-8-4 and is expected to reduce VOC emissions by at least 70%. Though not required for compliance, the catalyst is also expected to reduce CO emissions by at least 80%. Please refer to the enclosed Form 400-E-5 and enclosed manufacturer's information for more details.

A similar diesel oxidation catalyst was installed in December 2009 on the facility's seventh crane engine (D93). A source test of that engine on January 10, 2010, successfully demonstrated compliance with the 250 ppmv VOC emission limit.

Application forms are enclosed as follows:

111 W. Ocean Blvd., Ste 1240 | Long Beach, CA 90802 | Office: 562-628-1526 | Fax: 562-628-1536

- One Form 400-CEQA
- Six Forms 400-A (one for each engine plus one for amendment of facility permit)
- Five Forms 400-E-13b (one for each engine)
- One Form 400-E-5 (supplemental form for oxidation catalyst – same for each engine)
- One Form 500-A1
- One Form 500-A2
- One Form 400-XPP (request expedited processing)

Also enclosed is our check for $ 12,719.72 for fees per Rule 301 (Schedule B) as follows:

Modify 1st of 4 identical engines (D87, D89, D90, D92) (@100%)	$ 2,094.60
Modify remaining 3 of 4 identical engines (@50%, or $1,047.30 each)	$ 3,141.90
Modify D91 (@100%)	$ 2,094.60
Subtotal	$ 7,331.10
Expedited Processing per R301(v) (@50%)	$ 3,665.55
Amend facility permit per R301(k)(5) (both RECLAIM and Title V)	$ 1,723.07
Total	**$ 12,719.72**

The permit conditions for these engines, including the minimum (480°F) and maximum (1380°F) exhaust gas temperatures at the inlet to the catalyst and the 30 minute exemption for startup, should be the same as for the recently permitted catalyst installation on D93 (A/N 485767).

Please note that the application package for the recent Change of Operator (from Pacific Energy Resources, Ltd to Beta Offshore) is still being processed by the District. Thus, the enclosed application forms reflect the new facility ID for Beta Offshore (166073), but reflect application numbers for existing permits that are applicable to Pacific Energy Resources, Ltd. because the new application numbers applicable to Beta Offshore are not yet available.

The following certification is provided to satisfy the requirements of Rule 3005(c)(2)(A)(ii):

Certification:
Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this application package are true, accurate, and complete and that each of the proposed permit revisions comprising this application package meet the criteria defined in Rule 3000(b)(12) for minor permit revisions

And the following certification is provided to satisfy the requirements of Rule 3005(d)(2)(A):

Certification:
Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this application package are true, accurate, and complete, that the proposed permit revisions comprising this application package meet the criteria for group processing procedures and request that such procedures be used, and that Beta Offshore has notified EPA of the requested revisions.

Finally, per the requirement of Rule 3005(d)(2)(B), there are no other pending applications awaiting group processing for this facility and the emissions changes related to the requested revisions do not equal or exceed the thresholds defined in either Rule 3005(d)(1)(B) or Rule 3000(b)(6).

If there are any questions, or if additional information is required, please contact our HSE Manager, Ms. Marina Robertson, via phone at (562) 683-3497 or via e-mail at mrobertson@betaoffshore.com.

Thank you for your assistance.

Sincerely,

Steve Liles
Vice President and Chief Operating Officer

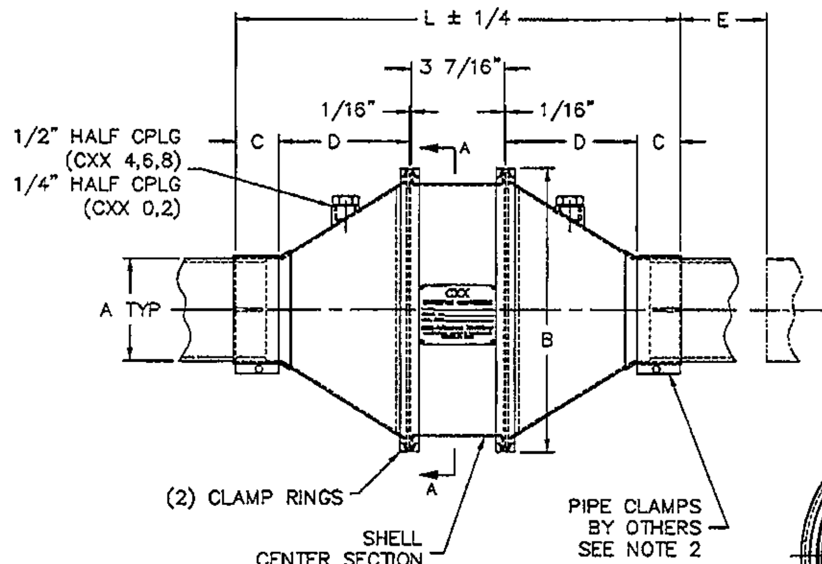
Enclosures:

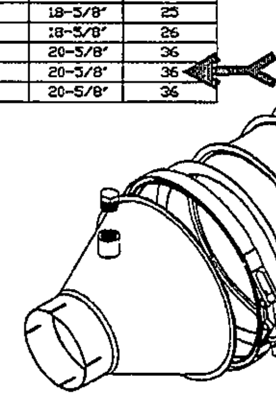
1) Check for $ 12,719.72
2) Application forms as described above
3) Manufacturer's Information for Johnson-Matthey Catalyst Model JM P/N CXXO-S-8-4

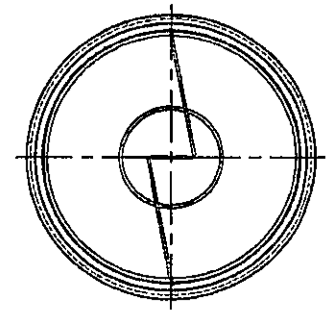
MODEL	A INLET & OUTLET I.D.	CATALYST DIAMETER (BANDED)	B CENTER SECTION OUTSIDE DIAMETER	C INLET & OUTLET LENGTH	D TRANSITION LENGTH	E INSTALLATION DISTANCE	L OVERALL LENGTH	WEIGHT, lbs (WITH CATALYST)
CXX0-3	3-9/16"	4-13/32"	5 3/4"	1-5/8"	1-25/32"	3-1/4"	10-3/8"	6
CXX2-3	3-9/16"	6 13/32"	7 3/4"	1-5/8"	2-7/32"	3-1/4"	11-1/4"	10
CXX2-4	4-9/16"	6-13/32"	7 3/4"	1-3/4"	2-3/32"	3-1/2"	11-1/4"	10
CXX4-3	3-9/16"	9-17/32"	10 7/8"	1-5/8"	5-29/32"	3-1/4"	18-5/8"	19
CXX4-4	4-9/16"	9-17/32"	10 7/8"	1-3/4"	5-29/32"	3-1/2"	18-5/8"	19
CXX6-3	3-9/16"	11-9/32"	12 5/8"	1-5/8"	5-29/32"	3-1/4"	18-5/8"	25
CXX6-4	4-9/16"	11-9/32	12 5/8"	1-3/4"	5-25/32"	3-1/2"	18-5/8"	25
CXX6-6	6-11/16"	11-9/32"	12 5/8"	1-7/8"	5-21/32"	3-3/4"	18-5/8"	26
CXX8-3	3-9/16"	14-17/32"	15 7/8"	1-5/8"	6-29/32"	3-1/4"	20-5/8"	36
CXX8-4	4-9/16"	14-17/32"	15 7/8"	1-3/4"	6-25/32"	3-1/2"	20-5/8"	36
CXX8-6	6-11/16"	14-17/32"	15 7/8"	1-7/8"	6-21/32"	3-3/4"	20-5/8"	36

REVISIONS

REV.	DESCRIPTIONS	BY	APPVD.
1	[illegible]	[illegible]	
2	[illegible]	[illegible]	[illegible]
3	REVISED PIPE CPLG [illegible]	[illegible]	[illegible]
4	SAMPLE PORTS PERPENDICULAR TO FLOW	[illegible]	[illegible]
5	ADDED TABLE & NOTE 3	[illegible]	
6	MODIFIED MODEL NUMBERS	[illegible]	
7	PRODUCT NAME TO CXX	[illegible]	







SECTION A–A

NOTES:

1. MATERIALS: 304 S.S.
2. RECOMMENDED PIPE CLAMPS:

TORCA ACCUSEAL 3" (TAA350) AND 4" (TAA450) AVAILABLE FROM RIKER PRODUCTS, 800-292-9744, WWW.RIKERPROD.COM

PIPING TECHNOLOGY AND PRODUCTS 6" FIG 50, 713-731-0030, WWW.PIPINGTECH.COM

3. FABRICATION DRAWING – DWG. 7387

ITEM	QUANTITY	DRAWING
CENTER BODY	1	7387
END PLATE	2	7387
GASKET	2	7387
ELEMENT	1	STD-010
CLAMP	2	7387

CXX
CATALYST MODULE
PIPE ENDS
SALES DRAWING

Johnson Matthey
MALVERN, PA
SSEC ENGINEERING

DRAWING NUMBER: CXX-C-8224 | REV. 7
SHEET NO. 1 OF 1 | SCALE 3/8 : 1

Johnson Matthey
Catalysts

400 LAPP ROAD, MALVERN, PA. 19355 T (484) 320-2136 F (484) 320-2152 www.jmusa.com

To: Beta Offshore

111 W. Ocean Blvd., Suite 1240
Long Beach, CA 90802

Attn: Marina Robertson **Email: mrobertson@betaoffshore.com**

Date: 12/2/2010

Quote No. 463-0-215

Phone: 562-683-3497
Fax: 562-628-1536

ENGINE DATA	
Engine Mfg:	Detroit Diesel
Engine Model:	6-71
Bhp:	195
RPM:	1800
Load:	100%
Fuel:	Diesel
Temp into Catalyst, °F:	480 - 750
Operating Hours, hrs/yr:	<500

ENGINE PREFORMANCE		
Exhaust Flow, dscfm:	Standard Cond.- 60F, 14.696 psi	763

EMISSIONS DATA	PRE	POST	% Reduction
CO, ppmvd @ 15% O2:	1000	200	80%
NMHC as CH4, ppm @ 15% O2:	400	120	70%

SCOPE OF SUPPLY	CXX0-S-8-4	
Exhaust Line Size, (inches)	4"	
Attenuation type	None	
Drawing reference:	C-8224	
Housing:	Stainless Steel	
Element(s)(Oxidation)	1	
Back Pressure: estimated (inches H2O)	~ 1.2 inches	
Application:	Platform Cranes	
Delivery: ARO	6 weeks	

Robert Bono, Western Sales Mgr. **Phone 949-297-5229** **Fax : 949-297-5210** **email: bonorp@jmusa.com**

Price firm and valid for 30 days from date of quote, FOB point of Manufacture, excludes any applicable duties and taxes. Terms, net 30 days from date of invoice as offered under Jm's General Terms and Conditions. Warranty 25 months from date of shipment or 24 months from date of start-up. Written notice required.
Maximum service temperature 1250 degree F. Minimum operating temperature 450 degrees F.

Johnson Matthey