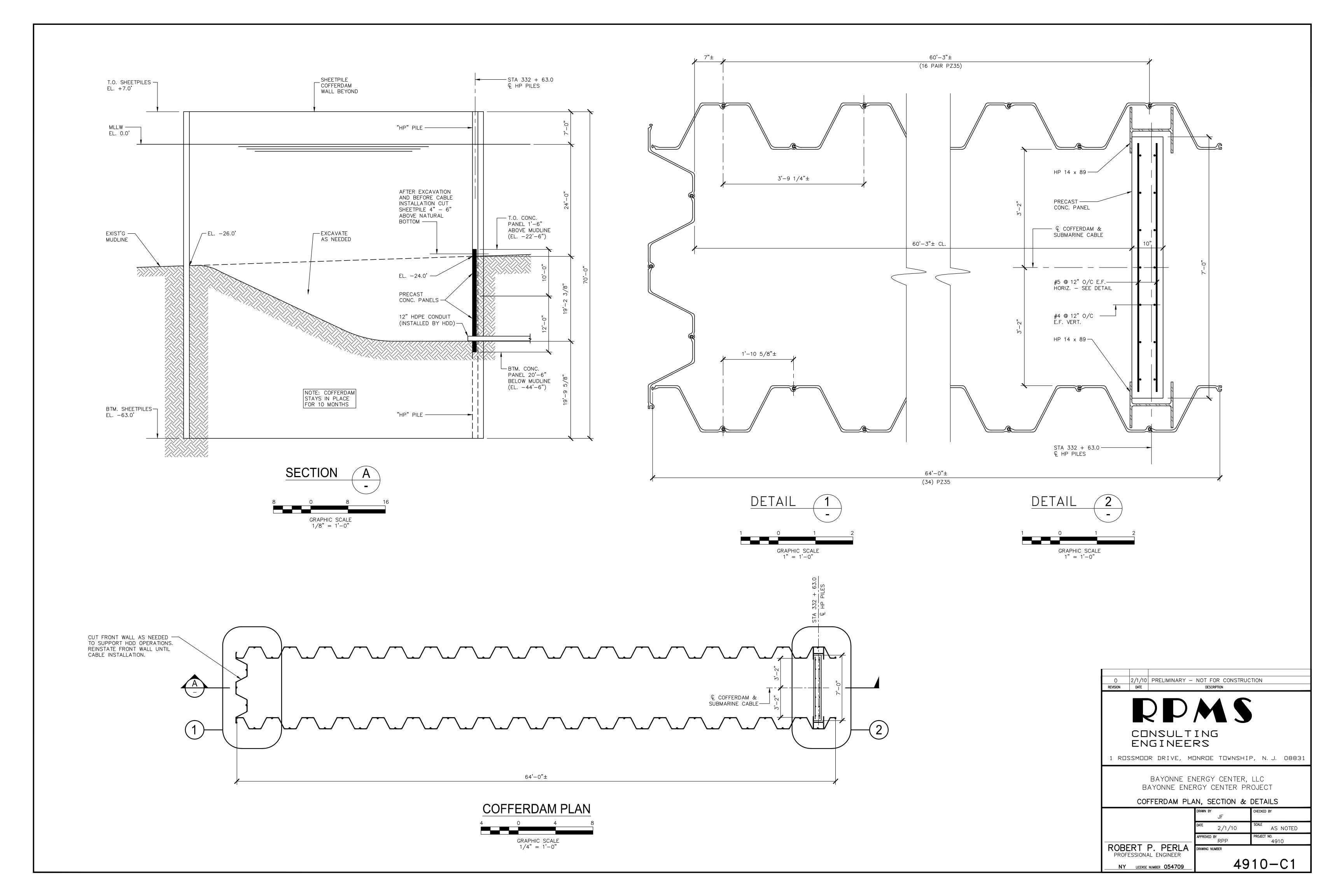
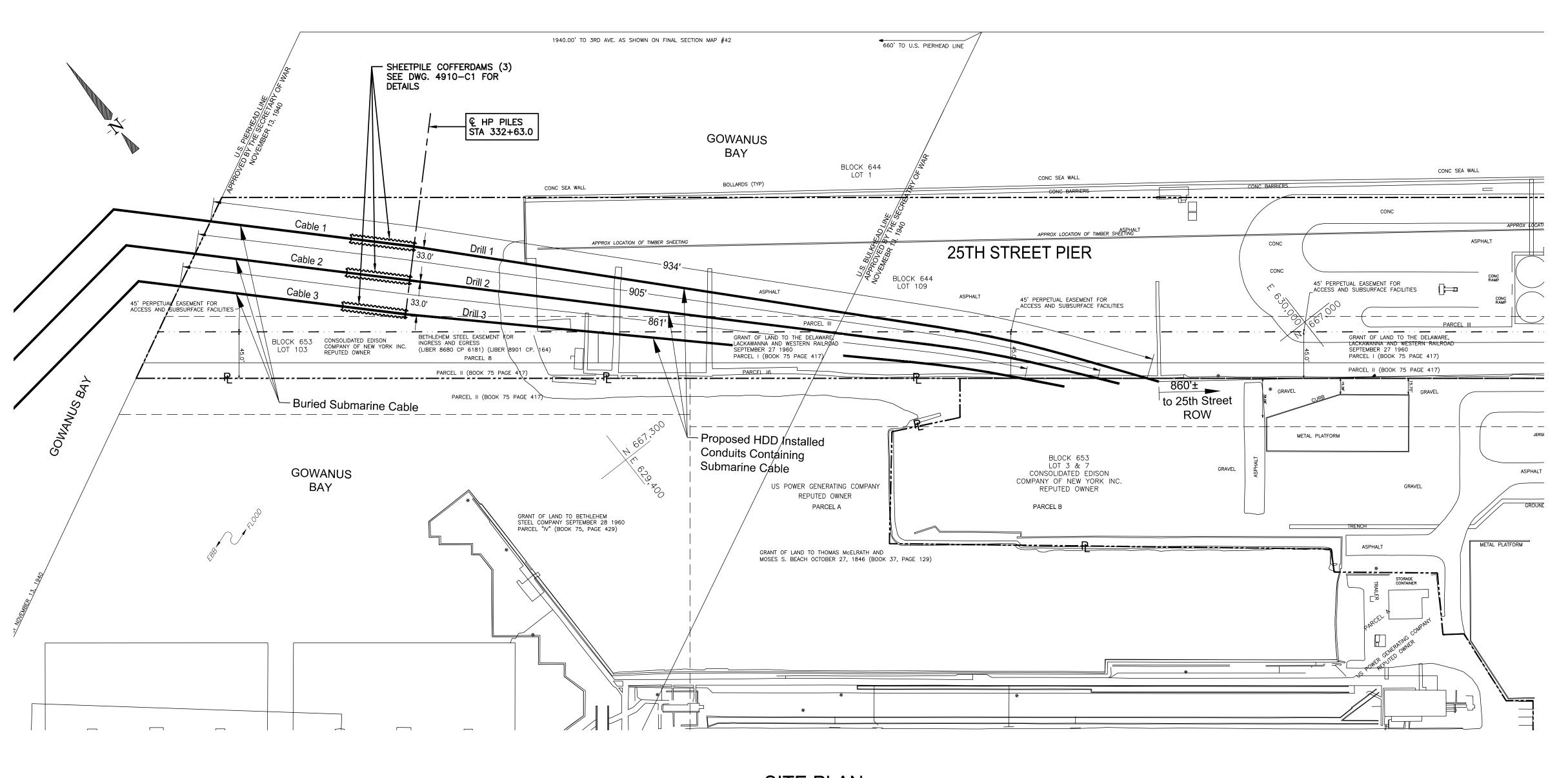
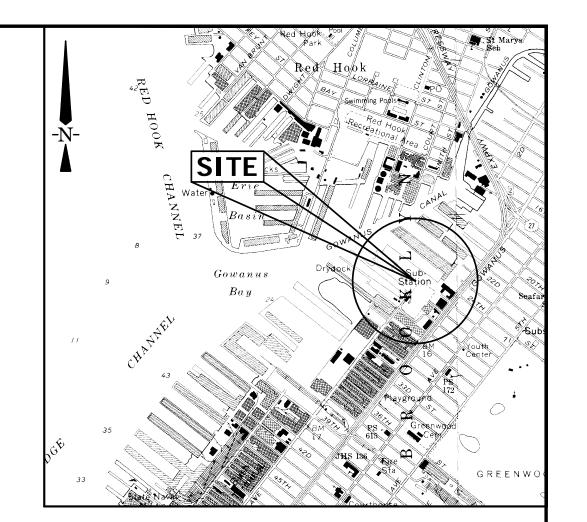
Appendix C

Project Plans



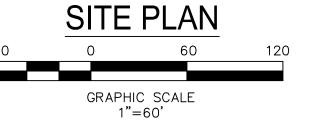






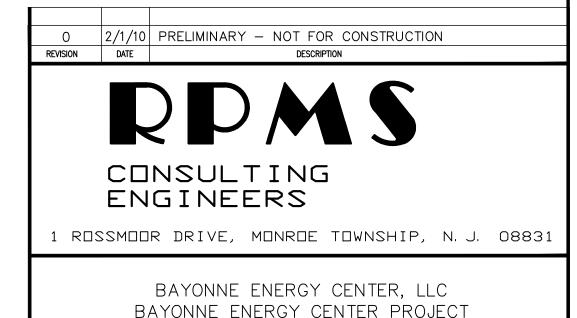
SITE LOCUS

N.T.S.



LEGEND: PROPERTY LINE — · · · — · · · — · · · — EASEMENT LINE

— — — — — — PARCEL BOUNDARY



BAYONNE ENERGY CENTER PROJECT COFFERDAM SITE PLAN

2/1/10 AS NOTED ROBERT P. PERLA
PROFESSIONAL ENGINEER

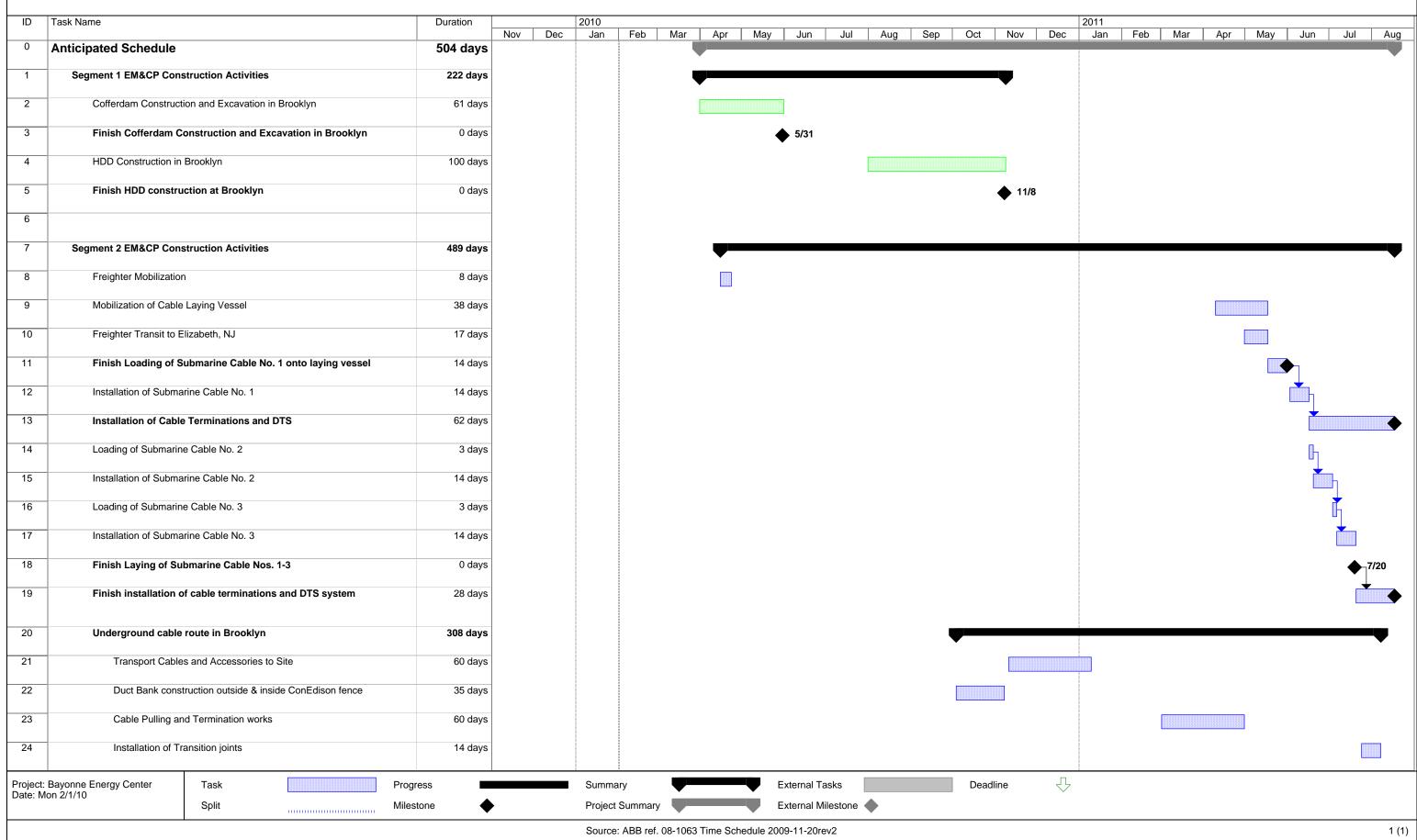
NY LICENSE NUMBER 054709

4910-SP1

Appendix D

Anticipated Construction Schedule





Appendix E

Construction Noise Mitigation Plan (Revised March 26, 2010)





BAYONNE ENERGY CENTER, LLC CONSTRUCTION NOISE MITIGATION PLAN

SEGMENT 1

NEW YORK LANDFALL IN BROOKLYN, NEW YORK: Temporary Cofferdam Installation and Dredging Horizontal Directional Drilling

b' D'94 B

Bayonne Energy Center, LLC
ZS b ' 2 ' & W Z' yggFY, Dµw D9y. Q' OTT
8 µQ& y, D DZ; ' TOPTN

b' D'98 B

ESS Project No. P273-015.02

February 1, 2010 W Q' 9B, DZ; FRyFTOT



TABLE OF CONTENTS

<u>SECTION</u> <u>PAGE</u>

ATTACHMENTS

0 DZ; - ' OB - ZQ v Q' , Q3DQ b μ D 4 - o' Q' 9 f μ FFyFTTPn

0 DZ; - ' 8B 0 μ ' D Q' v Q' , QQDQ b μ D 0 μ QDQ



1.0 INTRODUCTION

2.0 REGULATORY CONTEXT

I DZZ 9D Z' Q; .'Z Q FPAOTOy;''' Q̄μ΄ D Y ; Dμμ 'μ§ΑΖ' Q̄ξ Q Q v Q', QQ̄μD Q bμD; D Dμμ Z Z Q μ D 9 ' Q – '; D ' 7'' – DQ DQ'9 ; D ;'' ' D' D – D, – D §DZ ' ' DQ& 'ZQ̄gQ̄D Q y Q Zμ 9Q& D 'D' μ D9Q&d .'μ§ΑΖ' Q̄Q̄Q̄D Q ; Dμμ 7' Q 9Q̄Д̄D '9;'- Z Q v Q', QQ̄μD Q bμD § – Q Zμ 9'9 D 0 DZ; – ' 0d

(D12bQ 'ZQ §;' ' Q'y12b; Dμμ ';' Q'μ' 'μ& Q'μQ' QjQμ΄ OY §;' w μ΄ §;'-Q §v') 'y-; D ' FPy-Q Q'- ZQ v Q', QQDQ y σΟΥ w-v) FPn D D-'D § Q' Q Q&' Q-'; D-D 7';' ZD ' §D Q' Z - μDQ dl§12b9''-Q'; D D Q9QQ Dμ QZ' §' Q-' ' Z''9 ;' 'ZQQ9 μ΄ 'μ Q FPAOTUy12b Qμ Q ;' ' Q'μ΄ D d j;' ' Q'μ΄ D ; Dμμ; D';' Q B

• $b' \S - -DQ' D Z' - Q D' ;' Q' L$

^Og ZDµgD CON §FTTYd ^F-;D' FPy-Q QY'- ZQ ν Q', QQADQ y jQú OY §;'w μ΄ §;'-Q §v') 'y ;Q2; Q D DQD7μ΄ ΑγΩ'D <u>; BSS d Zd& S;-μ99'S 985 Q'JZ J μ΄d 98</u>d

Ñ O Z §; ′ bμD § - Dμ Q D DQD7ή ΑμΩ ′ D; <u>BSS d Zd& S9'</u> d

W I DμμD Q , D Dμ§ ; ′ v) I § D Z ′ ; ′ 8D ′ 2 ′ & -′ ′ NWY' . 7-D Q′ - D7ή . ′ - y w ′ D′97
- Dμ9 ′ μμ, D Q′ I ′ D Q Dμygg- yw dWyfD D NOyFTOTd

Yw Q1ή D ; Dμμ- ′ D y Q; ′ ′ Z D DZ QQ ′ & μD′9 Z ′ ′ 97 ; ′ ′ ή y ; ′ ′ § ; ′ ′ - Q′
; ′ ′ Z; DZ QQ ZZ y D 9 D D&′ § ; ′ ′ ′ & D&′9 Q Z; DZ QQ D D QQQD Q Z; DZ QQ y QZμ 9Q &
Z DZ D 9 7Z DZ d0 D&′ Z §; ′ - Q §v′) ′ - D Dμ 7′ D′ Q2ή D d

⁻ Q8; ⊚ 2...5 yl ZdyFTOT /66FKN7′Z /′Z6′&µD 6DQAµ́ Q0g′−tZ6′&⊷′ TO§QQµ′−tZ6D ′9Q′ Q′6 ZZ ZQ Q′−QQ&DQ µDJ§QQµJ′ NAFRAOTd9 Z



- w/μDZ′;′′Q−′ Q;′Q−′ ;DZ−μQ Q;;′′′ZQ\$QQ9μ′′μL
- 4Q1 D 0μ' DQ' v Q', QQ3DQ bμD Q; Q SQ' oYn7 Q' 9D §; 'Q 'ZQ d
- 0 0μ' DQ'vQ',QQ&DQ bμDD μQDDQ QQZμ9'9D0 DZ;-' 8d
- .'ZQ FWAFFF § ;' v d) d+ dD d+ d μ Q Z ZQ DZQQ '''9D 7''' ;' § KBTT D d+ d D 9 RBTT d+ d DZ D ''' '-QQ ' Q9';''; 9';' QQ § .'ZQ FWAFFNd
- .'ZQ FPAOTOo&n § ;' w-v) D' ;D ;' 1' D –' § 8 QQQ& o1 m8n '& μ DQ ' Q' D 'Q'' 7D Q y Z ZQ § Z'y D 9 ;' Q' Q Q; Q FTT §' § D 'Z' R D 'Z' QQ& ' y 'Q'' Q' 7D Q ;D μ \u00e4 7' §D7 Q\u00e4D'9 Q D\u00e4Z 9D Z' Q; ;' D 9D 9 ' § ; Q .'ZQ FPAOTKo' ndj ;' 'D' ' Q' –' § D 'Q'' 7D Q § ;Q b // Z d
- .'Z Q FPAOTFcDrcOrc8rcQn § ;' w-v) Q ' Q Q Q Q Q Q Q Q Q Q D C D D ' DZZ' D7 μ ;' 12bd .'Z Q FPAOTFcDrcOrc8rcQn D' ;D ;' ' Q μ D ''9 Q Q D D D; D Z μ § Q D Q 9 Q' y μ ;' ' Q μ D Q '§ Q & ' Q; Q NY §' § D Q 'Z' d
- .'Z Q OTFoDnoFno8no0 § ;' v Q' , QQD Q w μ ' Q' ; D 'Q;' Q ' /DZ'; D--' 9' μ y Z; D ;' Z , 9' μ j 2" bUT. y 7' '9y D7 μ Q' 7D Q Q' ' Z μ ' 7' ''Z'9 Z μ ' μ 7 μ Z' ;' μ Q' § QQ; 7' '' ;' /DZ'; D--' D 9 D 'Z' Q; Q FTT §' d j;' ' Q'-' § Q' 7D Q S' Z μ ' D' μ Q '9 Q .'Z Q OTFoDnoOno-nd
- .'ZQ OTFoDroNro8roQ § ;' v Q' , QQDQ w μ ' Q' ; D 'Q;' Q' 9' μ § ; ' D- y Z; D ;' 8 D: D- ' A' D9y 7' '9y D7 μ Q' 7D Q 7' ''Z'9 Z μ ' μ 7 μ Z' ;' μ Q' § QQ; 7' '' ;' ; ' D- D 9 D 'Z' Q; Q FTT §' d j ;' ' Q' ' § D Q' 7D Q D' μ Q '9 Q .'Z Q OTFoDroNro- rd
- .'ZQ OTFoZmoOno8moQQQ ' Q' ; D'Q;' Q' 9' μ §9 Z' y Z; D (d dA-D9' 2 ' D 2 Q –' D μ gD7' μ Z' y 7' '9y D7 μ Q' 7D Q 7' ' 'Z'9 7 μ Z' ;' μ Q' § Q&; § ;' 9 Z' ;' Q Q 7' Q & μ D9' 9 D 9 D 'Z' Q; Q FTT §' d j ;' ' Q' –' § D Q' 7D Q D' μ Q' 9 Q .'ZQ OTFoZmoOno-nd | D99QQ y D 7DZ' D μ D ;' 9 Z' 7' D Q' D Q & 9' QZ' Q DZZ 9D Z' Q; .'Z Q OTFoQfnd
- .'ZQ OTFc9rcOrc8rcOQ ' Q' ; D'Q;' D 9' ; 9 D μ Q Z D ' 7' '9y D7 μ Q' 7D Q 7' ' Z' 9 7μ Z' ;' μ Q' § Q; § ;' Z D' D ' Z' Q; Q FTT §' d j ;' ' Q' ' § Q' 7D Q D' μ Q ' 9 Q . ' Z Q OTFc9rcOrc- rd
- m; ' & ' D μ Z ZQ Q' ' Q' ' QZ μ 9' B

⁻ Qa; ⊚ 2...5 yl ZdyFTOT bDQs′F ,/66 FKN7′Z /″Z6′& μD 6D Qqú Qqg′−tZ6′&–′ ΤΟ §Q Dμ′−tZ6D ′ 9Q ′ Q′6 ZZ ZQ Q′−QQ8D Q μD J §Q Dμ ′ ΝνFRΑΟΤΑΘ Z



- 0 μμΖ ZQ ′ Q−′ ; Dμμ; D′D− §§ú §′′ § y; μ´yD9 μ´D′d
- h Q' 7DZ'A DμD ; Dμμ7' '9 Q 'AFTTP 9' μ'D '; Qξú ;' DZ QξD7μ´§ ;'
 / 7 Q'd, 9' μ'D FTTP '' '; Qξú ; Dμμ7'' Q'9 Q; D Q' 7DZ'A D Q& 9' QZ' Q DZZ 9D Z' Q; m.: 0 D 9D 9 d
- H;' 1m8 '& μDQ ' Q' D ' Q'' 7D Q Z ZQ § Z' D9 ;' Q' Q Q; Q
 FTT §' § D 'Z' y ' Q'' 7D Q'; Dμμ 7' §D7 Q̄D'9 Q DZZ 9D Z' Q; Dμμ § ;' D 9D 9 ' § ; Q .'ZQ FPAOTKd

3.0 OVERVIEW OF CONSTRUCTION ACTIVITIES

- D₁9 ′μμ, DQ′ I ′ DQ Dμγ gg- ′ D′9 D Q DμDQ - D Dμο;′ I DμDQ , D Dμn ; D Q' DZ - ′;′ Q′ 9′ ZQ Q § ;′ Q§D Z ′ Z ZQ 7′ 9 ′ Q v′) ' . D′γ D 9 Q QZμ 9′ 9 D D § ;′ .′ &- ′ O 2, t - b μD d′ j ;′ .′ &- ′ O Z ZQ DZ QQQ 7′ ′ § -′9 Q v′) ' . D′ o Q ;′ ZD7μ΄ Q DμDQ nQZμ 9′ : Q Dμ1Q′ ZQ Dμ1 QμQ& α 11 n D 9 Z §§ 9D- Q DμDQ d

I D99QQ ; 'μD9A7D'9' Q-'y-DQ'A7D'9 DZQQQ Qμ ZZ D9'Z'7D&'d
I DμμDQ , D Dμ.'ZQ RdWdDμQ ;''Q-'; D Qμ7' QQQ'9 ;'9'Z'7D&'dj;'§μμ Q&
QZ'§'Q-'§-; DμQ Qμ7'QZμ9'9 ;'vQ',QQ\$DQ bμD§-§;'b//ZB

- OYTAFTT D'L
- I-2 WORt: b. I WTT " O D 1 O' S2 DZ L
- 2 Q ′ Dµ-µD-;′µµ8 Z'′LD 9
- 5′′D d

<u>- § \$ 9D-I DynDQB</u>bQ:11 ′DQ;′′- Dµµ′- DZ§ \$ 9D- Qµ7′Z Z′9 D;′′QQ§;′:11 Z 9 Qd.′ZQKoW§;′I DynDQ, DDµQQ;′′Q-′′′Q′9 §

^K-D₁9 'µµ, D Q' I ' D Q Dµygg-yw' dNyfD D FPyFTOTd ^P8D'9 '-DQiZ' 9' Z'9D'9 OSFPSFTOT § - j 59§' D-D₁9 'µµ, D Q' I ' D Q Dµy-'D '9 9 ' ' µ́'µ D D 9 Q D Z' §KY §' § - D 11 FOT Q'' KU 98d

⁻ Qa; ⊚ 2...5 yl ZdyFTOT bDQ&′N /66FKN7′Z /″Z6′&µD 6DQQú Qq⊽−tZ6′&⊢′TO§QDµ′−tZ6D′9Q′Q′6ZZ ZQ Q′−QQADQ µDJ§QDµJ′MAFRAOTobZ



;′Z ZQ §;′Z§§9D-dj;′§µµQ&QZ′§′Q-′;Dµµ7′QZµ9′9 ;′vQ′,QQ&DQ bµD§—§;′b/″ZВ

- OYTAFTT D'L
- I-2 WORt: b. I WTT " Q D 1 Q'S2 DZ L
- μ ′92 Q ′ Dμ-μD– ; ′ μμ8 Ζ' ′ L
- 1 QQ&4 D-'L
- 5′′D L
- .1mF1Q'. 'D9LD9
- 1Q′µH′p9′ d

4.0 COMPONENTS OF THE CONSTRUCTION NOISE MITIGATION PLAN

- vD-′ §w′ Qµ′ bD aD 9′ §Q′ 9 Q OY w-v) FPAOTUnL
- H '.Q' g ZDQ Q; 8 &; 8gm-r Sgmj S099 'L
- - DZ b; 'v -7' §w' Qμ' bD LD 9
- 0 Q D' 1Q D Z' $-\mu$ ' w' Z' Q §' oD 9' Q 9' 9Q OY w-v) FPAOTUnd

- 1'- μQQ Z ZQ 'L
- 2 ZD DQ Z ZQ 'L
- 4 9DQ Z ZQ 'L
- . ' Z 'Z ZQ 'L
- 4QQ; Q&Z ZQ 'LD 9
- m;′Z ZQ 'd

j; 'bμD § - Dμ ' Q' ; ' ' Q'μ΄ D Q' Q§ ; ' - Dμ '; § ; ' Z Z Q DZ QQ y D 9' ξ Q' 9 Q FWAFFF § ; '09- QQ D Q' - 9' d 0 ZZ 9 Q& . 'Z Q RdFdF § ; ' I DμμD Q



, D D_yyZ ZQ 'DQ D'''Z'9 7'9 Q&9D μ**Q**;; d^y - ZQ DZQQQ -D D'' μDZ'9 Q&;'; § KBTT Dd+d RBTT d+d '''9D y DZZ 9Q&;' QQ Q.'ZQ FPAOTOd'n §;' w-v)d 0 D_μμ ;' Q''y;'' Q''μ D ; D_μμ 7 DQ D§'A; D; QDQ DZZ 9Q&;' QQ Q.'ZQ FPAOTNy; QZ; D'B

Dd 2 Q-' ; Dμμ7' '9 μ9 Q&;'; § KBTT Dd+dD9 RBTT d+d '''9D y
μ';'' Qμ' D 7 DQ D D§'; 'D; QDQ yQ; Q; ZD';'
'Q-' ; Dμμ7' '9 Q DZZ 9D Z' Q;;'; 'ZQQ9 Q;''-QD9 Q;' D§'
; 'D; QDQ yD' §; Q FWAFFN §;'09-QQ DQ'-9'd

7d H;' ' ZZ DS'; Q DZZ 9D Z' Q; FWAFFN S;' 09-QQ DQ' - 9'y $SD_{\mu\nu}$ Q; Q ' S;' ' Z' Q μQ Q DS'; D 9 '''' 9 Z Z Q ' ' S; Q FWAFFF S Z; - 9'y D99QQ $D_{\mu\nu}$ Q' - QQDQ Q - 'D ' D 9S 'Z; Q ' ; $D_{\mu\nu}$ T' Q μ - ' '9;' ' Q' 9 7 12bd

-' DQ ' DQ y Z; D 7'; μ 9 QQQ μ μQ& Z 9 Q ; &; 7'; μ y D' Z 9 Z'9 ' Z Q ' Q9 ; D QZDμ QQ D 9' 9 9 Q&; Z; ' 2; ' 9 μ 9 OFA; ' 9D d . 'ZQQZ Z 9QQ ; D Z μ9 D D Q&; Q' ' D 9 9' μQ' Q - D QZμ 9' D § ' '' ' Q-' 7' D' 9 ;' ;' ' Z Q ' DQ D' ZZ Q&d 0' Q-' 7' D' 9 Z μ9' Q' D Q-' 9' QQ' D Q D' QQ' D 9 ' '' ';' ' 7 '; μ Z Q' μμQ&;' Z 9 Q - D '' 9 7' 9 'y D 9 - D' ' 9 Q Q&; Q*; Q'; d 0 μ; &; ' Q-' QQ D' DQ' 9 D 9 ' D' 9 D Q9 7' D' 9 yZ Q&' Z μD Q& Q;''' § 7' D' 9 Q ' Z' D d . Z; '' D' ' D- μ § Z Z Q DZ QQ' ; D' Q DZ Q '' \$\$ Z' D' 9 y D '9 Q -' QQZD' - 9QQ CND 9 OWI

j;'vQ',QQQDQ bμD§ - QμQ'Q\$'0\$'o7'-Q -7'nD'-Q'Q'9§ - ;'v)-1'D-'§jD DQ ;'v)-1m8d

j;'' Q"μ΄ D Qμω(Q"' QS ;'Z ZQ 9' Q"' o' Q-'n '9 § ;'b /"Z DZZ 9Q & ;'9' §Q QQ Z DQ'9 Q;Q OY w-v) FPd h Q' Q"Z' §' Q-' Qμ 7' QQ '9 ;'''
Q"μ΄ d b QQ § ;'Q DμμDQ § Q'7D Q Dμμ D'Z DQ'9 Q;Q ;'D QD'

- Q5; © 2...5 y IZdyFTOT bDQ\$′Y /86 FKN7′Z /′Z6′& μD 6D Q½ Q0g′−tZ6′&−′ TO §Q Dμ′−tZ6D ′9Q′ Q′6 ZZ ZQ Q′−QQ&D Q μD J §Q Dμ ′ NAFRAOTAÐ Z



'ZQ ;D 9′Dµ Q; 'Z §2′Q – 'd j; 'v Q′, Q §2DQ bµD – Q° §3′Q – 'D 'Q′9 7′µ B

- bQi 1 Q'
 - o "Q'D bQi 1 Q' : 9 D μQI DZ bQi 1 Q' D 9' 8Q' 9 Q FPAOTFαDταΟταδιασQq
 - o v Q' 8' µµ D 9' §Q' 9 Q FPAOTFoDroOro8 ro QQ
- fDZ': D--'
 - h Q' D' D 9 9' μ D 9' 8Q' 9 Q FPAOTFoDnoFno8noQ
- : ' wD-
 - \circ h Q ' D ' D 9 9' μ D 9' \circ Q ' 9 Q FPAOTFoDroNro8roQ \circ
 - o v Q'.; 9 D 9' \$Q' 9 Q FPAOTFoDnoNno8no@
- 8µD Q&
- "DZ 2 ZD D
 - o . Dujú ZD DZQ DZA Z' D 9' §Q' 9 Q FPAOTFo7 no Ono 8 no Qi
 - Qi Z' D 9' §Q' 9 Q FPAOTFo7noOno8no@@
- 1 j Z'
 - \circ (. , D9' 2 'D 2 Q ' Dµ gD7' µ ' Q-' ' QDµ' D 9' QQ' 9 Q FPAOTFoZ noOno8 no QQ
- D'
 - , 9' : 9 D μQ D' D 9' §Q' 9 Q FPΑΟΤΕσ9ποΟπο8ποQQ
 - \circ (, , D9' 2 'D 2 Q ' D μ gD7' μ ' Q- ' ' QD μ D 9' §Q' 9 Q FPAOTFo9no8noOno@n
- Z''.D
- . D 97µD Q&
- 0 &' 1 QuwQk
- m;'

j;'vQ',QQADQ bμD ;DμμιQ' QS D99QQ DμZ ZQ 'Q-' 7' '9D;'Q'QZμ.9Q&B&''D yZ-' y ''μD'y7DZ' DμD-yD9 - d

Attachment A

Construction Noise Mitigation Plan Form (Revised July 22, 2008)

Construction Noise Mitigation Plan FORM

REVISED July 22, 2008*

It is not necessary to file this document with DEP

however, it must be accessible to inspectors.

The responsible party shall be liable for the accuracy of the document and compliance with all applicable rules in 15 RCNY Chapter 28.

Ι **Contact Information** Name of Responsible Party as defined in 15 RCNY §28-Work Site Location with Borough BLOCK/LOT/Address____ Contact Phone Number of Responsible Party_____ Approximate Distance To Closest Receptor (defined in §28-109 of Title 15 of the Rules of the City of New York(RCNY) feet. Demolition Construction Work is Taking Place from: Month____ Year____ to Month____ Year___ . Excavation Construction Work is Taking Place from: Month_____ Year____to Month____Year____. Foundation Construction Work is Taking Place from: Month Year____to Month____Year____. Superstructure Construction Work is Taking Place from: Month____ Year____to Month____Year____. Finishing Construction Work is Taking Place from: Month Year to Month_____Year____. Other Construction Work is Taking Place from: Month______ Year_____ to Month_____Year____. Normal Work Hours (as defined in §24-222 of the Ad. Code)_____. Dept. of Transportation Permit number(s)

Dept. of Buildings Permit number	S)
----------------------------------	---	---

II <u>Construction Devices</u>

Check applicable boxes below:

List of §102 construction devices to be used at the site.

When the additional devices listed below each category are utilized, the use of barriers as set forth in section IV herein is not required unless the Dept. of Environmental Protection receives complaints as set forth in §28-102(C) of Title 15 of the RCNY for each device. If however, the specific devices listed below each main category of devices are not checked, and you are using any of the main devices listed below, then the use of barriers set forth in Section IV herein shall be utilized. However, if you specified "other" in a category, you shall be required to utilize barriers as set forth in Section IV herein.

□PILE DRIVERS
□Vibratory Pile Driver or Hydraulic Impact Pile Driver as defined in
102(a)(1)(B)(ii)
□Noise Bellows as defined in 102(a)(1)(B)(viii)
$\Box \mathbf{No};$
□JACKHAMMERS
\square Quieter makes and models as defined in $102(a)(2)(B)(i)$
\Box No;
□HOE RAMS
\square Quieter makes and models as defined in $102(a)(3)(B)(i)$
\square Noise Shroud as defined in $102(a)(3)(B)(iii$
$\square \mathbf{No};$
□BLASTING
□VACUUM EXCAVATORS
\square Smaller Capacity vac-truck as defined in $102(b)(1)(B)(i)$
\square Silencer as defined in $102(b)(1)(B)(iii)$
$\Box \mathbf{No};$
□DUMP TRUCKS
☐US Made European Environmental Label equipment or equivalent as defined i
102(c)(1)(B)(iii)
$\Box \mathbf{No};$
□CRANES
☐ Modern Hydraulic Crane as defined in 102(d)(1)(B)(ii)
☐US Made European Environmental Label equipment or equivalent as defined i
102(d)(B)(1)(iii)
\Box No;
□CONCRETE SAWS
SANDRI ASTING

□AUGER DRILL RIGS. □OTHER
III Additional Construction Devices
List of additional applicable construction devices to be used at the site:
Note: DEP will utilize the Federal Highway Administration Roadway Construction Model as a means of identifying equipment either in Section II or III, that may be the cause of a noise complaint, see §28-101(a) of Title 15 of the RCNY for compliance options.
IV <u>Mitigation Barriers</u>
Noise Mitigation Barriers Utilized: If required as set forth in §28-101(g) of Title 15 of the RCNY. Required to use Perimeter barrier /DOB construction fence or temporary/moveable
barrier □yes □no?
PILE DRIVERS □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
JACKHAMMERS □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
HOE RAMS □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
BLASTING □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
VACUUM EXCAVATORS □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
DUMP TRUCKS □ Perimeter barrier/DOB Construction Fence or □ Temporary barrier □ Moveable barrier

CRANES □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
AUGER DRILL RIGS □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
STREET PLATES □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
BACKUP ALARMS □Perimeter barrier/DOB Construction Fence or □Temporary barrier □Moveable barrier
CONCRETE SAWS □ Perimeter barrier/DOB Construction Fence or □ Temporary barrier □ Moveable barrier
*Use latest version of the plan which can be found on the DEP Website at www.nyc.gov/dep/html/airnoise.html .
I <u>Name of Responsible Party</u> of the <u>Company</u> hereby certify the information contained in this form is true and accurate.
<u>Signature</u> <u>Date</u>
NOTARY PUBLIC

Attachment B

Alternative Noise Mitigation Plan Application

Alternative Noise Mitigation Plan Application as per Section 24-221 DATE*

It is necessary to file this document with DEP. The approved plan must be accessible to inspectors.

In accordance with Section 24-221 of the New York City Administrative Code, any individual or entity performing construction work in the city, shall adopt and implement an alternative noise mitigation plan for each construction site when any device or activity deviates from strict compliance with the noise mitigation rules as defined in Section 24-219. The attached sample form of an alternative noise mitigation plan is intended to inform the user of the required plan elements that a responsible party shall include when the listed devices are being used on site and the mitigation strategies and best management practices defined in 15RCNY Section 28-102 cannot be strictly complied with. The responsible party shall be liable for the accuracy of this document

and compliance with all applicable rules in 15 RCNY Chapter 28.

I <u>Contact Information</u>

	Responsible Party as		NY §28- —
	e Location with Bord LOT/Address		
Contact F	Phone Number of Re	esponsible Party	
	nate Distance To Clo he City of New Yorl	- `	ined in §28-109 of Title 15 of the feet.
	on Construction Wor to Month		from: Month
	on Construction Wo		from: Month
Foundatio	on Construction Wo	rk is Taking Place	from: Month
	on Construction Wo to Month		
Year	to Month	Year	

Other Construction Month	Work is Taking Place from: Month Year	Year	_ to
Normal Work Hour	rs (as defined in §24-222 of the Ad. Code)_	•	
Dept. of Transporta	tion Permit number(s)		
Dept. of Buildings P	Permit number(s)		
II Device (s) Be	eing Used, See 15 RCNY §28-102		
1			
2			
3			
4 5			
III <u>Describe in I</u>	Detail Noise Mitigation Methods Proposed ocumentation if necessary).	: (Attach diagrams	<u> </u>
1			
2			
		_	
DEP USE ONLY		====	
Approved (Signature	e of the Agency Head or Designated Representative)	(Date)	
Disapproved (Signature	e of the Agency Head or Designated Representative)	(Date)	

^{*}Use latest version of the plan which can be found on the DEP Website at http://nyc.gov/dep.

Appendix F

Independent Inspector(s)
Certification and Documentation



ENVIRONMENTAL OBSERVATION REPORT



DATE: JJJJJJJ WEATHER CONDITIONS: JJJJJJJ
INSPECTOR: JJJJJ Site Location: JJJJJJJJJJJJJJJJJJ

LOCATION & CONSTRUCTION	FIELD OBSERVATIONS	RECOMMENDATIONS	CORRRECTIVE ACTIONS
ACTIVITY			REQUIRED/TAKEN

ITEMS OR LOCATIONS	INSPECTION TO BE	ACCEPTABILITY CRITERIA TO BE
	EMPLOYED	APPLIED
On-water Activities		
. Qu '' Q' Q-' o7 - yD7 7' D9 y Qu'''' Q'Zdh'D9QuD DQD7μ' ; &; Z ZQ Q'd	"Q Dµ	0 Φ2'' Q-''' D 9 Q'D9 'Z@SZDμμD 9 ' Φ2μ'μ΄D' Q σ; 9 DμΩΣ ; 'y&''D y'Zdh
- ZQ 'Q-'ZúD DZZ 9Q& 8, b Q QA D' '	"Ó Dh	v 'Z' Q' Qu &'D' '' ' Q-' ;D QuZ-'Q Z DZ Q; D'
4Q′′Q&Q′′′′D9DDΦΦ7μ́	"Q Dµ	4Q'' Q& Q;''' D 9 D DQD7μ
Cofferdam Activities		
0 Ζμ ′9΄ Q –′ Dμ7 Ζ'΄; Dμμ7΄ ′9 § 9′9&Q& Qu ;′ §Q′A& DQ′9 – D′ ΦΩμ 9 Q& Z§§ 9D– 9′9&Q&d	"Q Dµ	2 '; DZ'Z7Z'Q7'Q& '99Q&Dμμ9'9&Q&DZQQQdd I§ Q&QQD μ § D'D9 QQQμ''9Q'' § -;'7Z''Q 7''9y;''D Q9''9'Q'Z;Dμμ;Dμ 9'9&Q&'DQD9Q'Z;' 7Z''§ 9'§Zd
j;'-D' Φμ'- '9-D 7' '9 ' ZD ' '9 ;' D' dj;'7 Z'' ; Dμμ 7' μ ''9 ;' μ' 'μ §;'7D&'& Dμ΄ Q 'μ'D' §;'μD9d	"Q Dµ	I 'Z Qu' ';DZ' @ZZD' Z 9QQ D'-' D9D9;''9 d

ITEMS OR LOCATIONS	INSPECTION TO BE	ACCEPTABILITY CRITERIA TO BE
	EMPLOYED	APPLIED
8 Z''; Q''9; Dμμ7'μQ; Q'9 D Q: D'μ F §'''Z 9dj;'7 Z''; Dμμ7'μQ§'9 Q D Z Q - Q; &; ;' D' Z μ - D 9 Q;'7D &'dj;'' ; Dμμ7' 7D &'' §μ d	" Ó Dh	I 'Z Qu' ';DZ' (\$QZD' Z 9QQ D'-' D9D9;''9 d
j;'Z DZ; Dμμ9'- D';' I 9''9' I 'Z i DQ\$DZQ; D;' 7 Z''9'9&''D; D \$\$QQ Z μ ';'7 Z''9'; Q;' D'D9 7 Z''Zμ''; D;''9Q' ''Q § -7 Z''Z DZ Q;;' 7 - D 9 7 Z''' A\$QQQ&Q-QQQ'9d I 'Z Qμ' (§; D;'7D&'QQ&9	"Q Dµ	l 'Z Qu' QS; D 7 Z'' 9'9&' 'D; D\$\$QZQ Z μ§7 Z'' 9'; D9; D '' QQ – QQ- Qpd
I 'Z Qμ' Qξ ; D ; '7D & 'Q Q & 9 'DQ & Z 9QQ D 9 D QD' μ 9' Qξ '9 Z DQ 9QZ; D & '9 Q-' d	"Q Dµ	'Z QuQ 'Z ;'7D&' ' 'Q-'' Z'@\$QTD' ' Q'-' D9§ 'Dµu ' Q -' DµZ- DQ*QQQd
1′9&′9 – D′ΦΩμ; Dμμ 7′ Φ(′ZD y Z' Φ(19 AC/y ′AQ 9 Z'9Q ;′ D′d	"Q Dµ	v @'ZD Q& Z' @Q& § -D' @Qµ @µ7' Dµµ '9d v 'A Q 9 ZQ §9'9&'-D' @Qµ Q ;' D' @µ7' Dµµ '9d
- ZQ 'Q-'ZÚD DZZ 9Q& 8, b Q QA D'' 4Q''Q& Q;'''D 9 D DQD7Ú	"Q Dµ	
4Q′′Q&Q′′′′D9DDΦΦ7μ́	"Q Dµ	4Q''Q&Q'''D9 DDQQ7μ
HDD		
, Q § 8′ Q′ § DZ ′ 7′ D′	"Q Dµ	, Q μD 9 D'D Dμ & ;' :11 7 '; μ΄ Dμαδι –' D 9 ;' 5 D 8D ; Qμ΄ DZ Q':11 ' DQ D' 9' D Q' Qξ D 9 7'' ' Q0μ9 QμQ & ξμ Q' 7'D' Q d
, Q § 8′ Q′ § DZ ′ 7′ D′	- 9QD' Q; :119 QQ&Z' '&D9Q& D	- §Q-9 QqQ& §LQ
8' Q' § DZ ' 7' D' ''	1 Z -' DQ	1 Z - ' 82- Z DZ Q μ - ' DQ §4μ Q g W ' bμD d v Q v).1b. D 9 v).12- §;''' d
8′ Q'§DZ ′ 7′D' ZÚD A	1 Z -' DQ	1 Z - ′ 82- Z DZ ′§§ Z DQ D 9 ′- ′ ′μ́ D ′9 9 QqQ & §μ Q d
, Q § ; 9 ZD7 'μ΄D' § – Z ZQ ' Q-'	"Q Dµ	v ;'' D'y QQ'μ΄ Qμι ' Q-' μ΄D'

ITEMS OR LOCATIONS	INSPECTION TO BE	ACCEPTABILITY CRITERIA TO BE
	EMPLOYED	APPLIED
Upland		
0 Φ''9Q' D9' Q Z μ	"Q Dµ	.'9Q' D9' Q Z μ
-'D'		; μ97′Q Dμμί9D ′9D9 -DQDQ′9D ΦΩ′μ
. Qu ′′ Q ′ Q−′ o7 − yD7 7′	"Q Dµ	0 Φ'' Q-'''
D9 y Qμ ′ ′ 'Q ′ Zdh ′ D9Qú D DQQD7μ́		D 9 Q′D9 ′ZQQQDµuD 9
; &; Z ZQ Q'd		′ Φ0μ′μ́D′ Q σ; 9 DμQ7
		; ' y&' ' D y' Zdh
4Q′′Q&Q′′′′D9DDQQD7μ́	"Q Dµ	4Q'' Q& Q;''' D 9
		D DQD7µ́
General		
0 Φ ' § ' μ D&' Z' 9 '	"Q Dµ	b' μ́ – 9 Z '9 Q
		D Q0'8DZQQQQdd
0 Φ0' D; 9Q DμεροΖΦΦΟ D Dμμ	"Q Dµ	j D; 9Q DµZ DQ′′′′
Z ZQ Q αQZμ9Q&-DQ′′′μn		D 9 'D9Q D DQD7µ'
g ZDµ. D'D 9 4'9'Dµ' – Q''D 9	"Q Dµ	b' -Q '' D/7 Q D9
D DQQD7μ΄ D / 7 μ ZD Q d		DDQD7μ′ ′μαl

ADDITIONAL COMMENTS:	

ENVIRONMENTAL ISSUES PENDING:		

OVERVIEW OF UPCOMING CONSTRUCTION ACTIVITIES:

l; D′′ Dμμ′ D-Q′9 D 9 D- \$D-QQQD Q; ;′Q§ - DQ 7-Q′9 Q;Q9 Z -′ D 9 Dμμ D DZ; -′ ;′′ y D 9 l Z′ Q§ ; D y 7D′9 ′ D D7 μ́ Q′ Q&DQ y QZμ 9 Q&- Q Q §; ′Q9 QQD Dμ′ Q7 μ́ § 7 DQ Q&;′ Q§ - DQ y;′ 7-Q′9 Q§ - DQ Q ′y DZZ D′y D 9 Z - μ′′ ;′7′ §- ′ μ′9 &′ D 9 7′μ Q sd

m7′′ . Q D ′ S1D′B

Appendix G

Table 2-1 of Required Permits, Certificates and Authorizations Copies of Those Obtained



Table 2-1 Required Permits, Certificates, Authorizations and Current Status Bayonne Energy Project

Updated: 5 Apr 2010	Received	Expected
Federal Permits/Approvals		
US Army Corps of Engineers		
-μ´D HD′ 0Z .′ZQ WTWvDQ Q ' I 9Q Q Dμb′ – Qv	D μQ9	OTAO AOT
m 'i''Z Q Z 'Z'Q'9 F 0 OT -μ΄D H D' 0 Z .'Z Q WTW ν D Q Q' Ι 9 QQ Dμb' – Qγ m 'i''Z Q Z 'Z'Q'9 F 0 OT	D μ Q 9	OTAO AOT
Federal Aviation Administration		
v:DD9 vDQbDQ 1′′-QDQ yo pQb; Q&′i9n	FKA4′ 7ATU	
Federal Energy Regulatory Commission		1
j D Z .′Z KoZn-′ QβQΣD′§ Q′μQ′Z ZQ yQ ′9	WAFD AOT	
j D Z .'Z KoZn-' (S QZD' § Q'µQ' Z Z Q y DZZ' '9	WAH' 7AOT	
j D Z 4Q- 1'μQ' gD' Dμ.' Q' σ41g. nwD' D '9	FRAF ATU	1
United States Coast Guard	1101 700	
b QD′ 0Q vD QbD Q		NTAO AOT
New Jersey Permits/Approvals	1	11110 701
Department of Environmental Protection	1	
0Qb µµ Q - µm ′ DQ&b′ – Q	FWA ' ATU	
0Z 9 wDQ b' - Q	FWA / ATU	
HD'§ 1''μ -' S-D DμH'μD 9 b' - Q yQZμ 9' B	OYAFD AOT	
9QQ Dµb' - QS µD 9	QZµ 9′ 9	
9Q@ Dub' - QS D'	QZµ 9′ 9	
HD'h DAQ -' (\$720'	QZµ 9′ 9	1
- D Duz ' - Q' Z	QZµ 9′ 9	1
5′′ Dµb′ – Q§ . – D′ S§ ′ DQ	QZµ 9′ 9	1
5	QZµ 9′ 9	
- ZQ D' 1QZ; D&' . \$DZ' HD'	QZµ 9′ 9	
HD'§ 1''μ -' , 9@27DQ 0μμ Q&2Dμ - §§ 9D-	OPAH' 7AOT	
j Q' μD 9 8 'D m 'A4'' 2D'-'	D µQ9	NTAO AOT
j 'D-' H ' O Duoj H On § 168 D Q Z 'Z Q	OKA, DAOT	NIA AI
NJ: Local Permits/Approvals	GIV, DAGI	
City of Bayonne Planning Board		
 	FNAO ATU	
, D/ . Q′ bμD 0	OWAmZ ATU	
	OVIATIC ATO	
Passaic Valley Sewerage Commission (PVSC) .' ' - 'Z b' - Q	FOAFD AOT	
	T UA D AUI	
New York Permits/Ministerial* Approvals Public Service Commission		
	OFAV ATU	
-' (\$172D' § D (7000, D 9 b 7)402 v''9 C2 d, D D&(-' t - ZO b)D vv) - \$5(9D-B,'&-' O	NOA, DAOT	
C2 d, D D&′-′ t - Z Q bμD yv) - §§ 9D-B.′&-′ O C2 d, D D&′-′ t - Z Q bμD yv) - D7μ΄B.′&-′ F	NOT DECI	OYAF JAOT
Department of State	+	OIA POI
HD' h DQ -' (\$\frac{1}{2}\text{D}')	OFAV ATU	
- D Duz ' - Q' Z - Z ' Z'	NOA, DATU	
	NOA, DAIU	
Office of General Services - D7μ - Z Q 2D'-'	+	ETM M
		FTAO AOT
NY: Local Permits/Approvals	+	
New York City	ENIA D ACT	
v)-1mj w/ ZD7μ́- ′ 0&′′-′	FNA, DAOT	



STATE OF NEW YORK DEPARTMENT OF STATE

DAVID A. PATERSON

ONE COMMERCE PLAZA 99 WASHINGTON AVENUE ALBANY, NY 12231-0001

LORRAINE A. CORTÉS-VÁZQUEZ SECRETARY OF STATE

March 31, 2009

Mr. Payson R. Whitney, IIII, PE Senior Engineer - Land Development & Engineering ESS Group, Inc. 888 Worcester Street - Suite 240 Wellesley, Massachusetts 02482

Re:

F-2008-0886

U.S. Army Corps of Engineers/New York District Permit Application NAN-2008-1564-WCA - Bayonne Energy Center

(Case #08-T-1245)

Construct, operate and maintain a 512 MW electric operating facility and the installation of a 345 kv submarine transmission Cable across and in the bed in Upper NY Bay & Gowanus Bay.

Gowanus Bay, City of Brooklyn, Kings County

General Concurrence

Dear Mr. Whitney:

The Department of State received your Federal Consistency Assessment Form and consistency certification and supporting information for this proposal on November 18, 2008.

The Department of State has determined that this proposal meets the Department's general consistency concurrence criteria. Therefore, further review of the proposed activity by the Department of State, and the Department's concurrence with an individual consistency certification for the proposed activity, are not required.

This General Concurrence is without prejudice to and does not obviate the need to obtain all other applicable licenses, permits, other forms of authorization or approval that may be required pursuant to existing State statutes including permission from the New York State Ofice of General Services for the use of the New York State-owned underwater lands and permits from the New York State Department of Environmental Conservation and furnishing that department the information necessary for crafting those permits.

When communicating with us regarding this matter, please contact us at (518) 474-6000 and refer to our file #F-2008-0886.

Sinkerely

Supervisor of Consistency Review Office of Coastal, Local Government and Community Sustainability

JZ/dc cc:

COE/New York District - George Nieves/James Cannon DEC Environmental Permits - Betsy Hohenstein DEC/Region 2 - John Cryan NYS OGS - Al Bauder NYS PSC - Philipose Philip

NYC WRP - Eddie Greenfield

Appendix B

PROPOSED § 401 WATER QUALITY CERTIFICATION

NEW YORK STATE PUBLIC SERVICE COMMISSION WATER QUALITY CERTIFICATION

Pursuant to:

Section 401 of the Clean Water Act, 33 U.S.C. § 1341 (a)(1); Article VII

of the New York State Public Service Law; 16 NYCRR Subpart 85-2;

and 6 NYCRR Section 608.9.

Certification Issued to: Bayonne Energy Center, LLC c/o Pure Energy Resources, LLC

> 25 Mall Road, Suite 100 Burlington, MA 01803

Facility Description

Bayonne Energy Center, LLC ("BEC") proposes to construct, operate, and maintain a 6.6-mile, 345 kilovolt alternating current (345 kV AC), 3 phase circuit, submarine electric transmission facility. The facility will run under the sea floor of Upper New York Bay and will connect BEC's electric generation facility in Bayonne, New Jersey to the Consolidated Edison Company of New York, Inc., Gowanus Substation in Brooklyn, New York. The details and justification for the Facility are contained in the administrative record before the Public Service Commission in Case 08-T-1245.

Location of Facility

The Facility will consist of a 6.6-mile, 345 kV AC, 3 phase circuit, submarine electric transmission cable and related equipment. All of the Facility will be buried except for a short portion of the upland transmission cable and associated electrical interconnection equipment within the existing Consolidated Edison Gowanus Substation. The proposed Facility route lies underneath the sea floor of the Upper New York Bay and underneath the 25th Street Pier in Brooklyn, New York. No streams or freshwater wetlands are crossed. The right-of-way will be maintained in accordance with the Environmental Management and Construction Plan ("EM&CP") for the proposed line, and the Certificate of Environmental Compatibility and Public Need (the "Certificate").

Certification

The New York State Public Service Commission certifies pursuant to § 401 of the Clean Water Act, 33 U.S.C. § 1341(a)(1), and Article VII of the New York State Public Service Law, 16 NYCRR Subpart 85-2, and 6 NYCRR Section 608.9, that if BEC submits an acceptable EM&CP and complies with the conditions stated below, construction of the Facility will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, as amended, and will not violate New York State water quality standards and requirements. This certification is issued in conjunction with the Certificate issued to BEC in Case 08-T-1245, and any EM&CP as approved.

Water Quality:

During the jet plow installation of the cable, the concentrations of the chemical constituents listed below, as measured in the samples collected 500 feet down-current of the jet plow shall not exceed the greater of: (A) the levels set forth in the table below or (B) 1.3 times the highest ambient background

level measured during the same sampling day at the up-current background station at the same depth as the down-current sample.

Standard or Guidance Value (ug/L)
36
7.7
7.9
204
0.05
0.2

All water quality laboratory analyses required in this Certification must be conducted by a laboratory certified by the New York State Department of Health. If the compliance criteria described above are exceeded at any time during the installation, additional water quality sampling shall take place at the location of the exceedance for subsequent cable installation passes.

Conditions

- 1. No in-water work shall commence until all pre-construction conditions relating to such work contained in the Certificate have been met to the satisfaction of the New York State Public Service Commission.
- Construction and operation of the Facility shall at all times be in conformance with the application in Case 08-T-1245, to the degree not superseded by the Certificate, and all conditions of approval contained in the Certificate.
- 3. Construction and operation of the Facility shall at all times be in conformance with the terms and conditions of the Joint Proposal dated October 5, 2009, and filed in Case 08-T-1245, to the degree not superseded by the Certificate.
- 4. Construction and operation of the Facility shall at all times be in conformance with the EM&CP, and all conditions incorporated in any order approving the EM&CP, in Case 08-T-1245.
- 5. BEC shall provide a copy of this certification to the U.S. Army Corps of Engineers along with a copy of the application, Joint Proposal, Certificate, EM&CP, and order approving the EM&CP (and all subsequent EM&CPs and approval orders) in Case 08-T-1245 so that the U.S. Army Corps of Engineers will have a complete record of the conditions that apply hereto.
- 6. BEC shall provide to all construction contractors complete copies of the Article VII Certificate, the approved EM&CP, and this certification.

Certified by:

Name: FLOYD E. BARWIS
Office of Energy Efficiency and the Environment

New York State Department of Public Service

Three Empire State Plaza Albany, New York 12223

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF LAND USE REGULATION
501 East State Street, Station Plaza 5, 2nd Floor
P.O. Box 439, Trenton, New Jersey 08625-0439
Fax: (609) 777-3656 or (609) 292-8115 www.state.nj.us/dep/landuse



PERMIT

In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.

Approval Date

JAN 1 2 2010

Expiration Date

JAN 12 2015

Permit Number/s 0901-08-0001.1 WFD 080002, WFD 080003

Type of Approval/s Waterfront Development IP Upland, Waterfront Development IP In Water and Water Quality Certificate Enabling Statute/s N.J.S.A. 12:5-3 N.J.S.A. 58:10A

Applicant

Bayonne Energy Center, LLC attn: Neil Collins 25 Mall Road – Suite 100

Burlington, MA 01803

Site Location

Block: 482 Lot: 9

City of Bayonne, Hudson County, New Jersey

Bayonne Energy Center will construct a 512 megawatt electric power generating and transmission facility located within Lot 9 of Block 482 in the City of Bayonne, Hudson County, New Jersey. The upland portion of the project consists of an electric power generating station and installation of 0.6 miles of three electric transmission cables. The in water component of this project consists of three 6.3 mile long electric transmission cables installed via jet plow embedment crossing the Kill Van Kull, Upper New York Bay and Gowanus Bay making landfall south of the Lafarge Cement Brooklyn Terminal in New York connecting to the New York Independent Operator electrical grid.

This permit is authorized under, and in compliance with the following Rules on Coastal Zone Management, N.J.A.C. 7:7E-1.1 et seg., specifically: Finfish migratory pathways 7:7E-3.5, Navigation channels 7:7E-3.7, Ports 7:7E-3.11, Filled waters edge 7:7E-3.23, Historic and Archaeological Resources 7:7E-3.36, Endangered or threatened wildlife or vegetation species habitats 7:7E-3.38, Special urban areas 7:7E-3.43, New dredging 7:7E-4.7, Subchapter 5 and 5A Impervious and vegetative cover limits, Energy facility use rule 7:7E-7.4, Dredge material placement on land 7:7E-7.12, Marine fish and fisheries 7:7E-8.2, Air quality 7:7E-8.10 and Public trust rights 7:7E-8.11.

By issuance of this permit, the State of New Jersey does not relinquish tidelands ownership or claim to any portion of the subject property or adjacent properties. The permittee shall allow an authorized Division representative the right to inspect the construction pursuant to N.J.A.C. 7:7E-1.5(b)4.

Prepared by

Kimberly Kerkuska Senior Geologist

01/27/2010 02:46:48 PM DEED

Bk: 8712 Pg: 554 Hudson County, Register of Deeds

THIS PERMIT IS NOT EFFECTIVE AND. Receipt No. 281115 APPROVED BY THIS PERMIT, OR OTHER REGULATED ACTIVITY, MAY BE UNDERTAKEN UNTIL THE APPLICANT HAS SATISFIED ALL PRE-CONSTRUCTION CONDITIONS AS SET FORTH IN THIS PERMIT.

Received or Recorded by County Clerk

This permit is not valid unless authorizing signature appears on the last page.

Bayonne Energy Center, LLC
DLUR File No.: 0901-08-0001.1 WFD 080002-3

Page 2

STANDARD CONDITIONS:

1. Extent of approval:

- a. This document grants permission to perform certain activities that are regulated by the State of New Jersey. The approved work is described by the text of this permit and is further detailed by the approved drawings listed herein. All work must conform to the requirements, conditions and limitations of this permit and all approved drawings.
- **b.** If you alter the project without prior approval, or expand work beyond the description of this permit, you may be in violation of State law and may be subject to fines and penalties. Approved work may be altered only with the prior written approval of the Department.
- c. You must keep a copy of this permit and all approved drawings readily available for inspection at the work site.
- 2. Acceptance of permit: If you begin any activity approved by this permit, you thereby accept this document in its entirety, and the responsibility to comply with the terms and conditions. If you do not accept or agree with this document in its entirety, do not begin construction. You are entitled to request an appeal within a limited time as detailed on the attached Administrative Hearing Request Checklist and Tracking Form.
- 3. Recording with County Clerk: You must record this permit in the Office of the County Clerk for each county involved in this project. You must also mail or fax a copy of the front page of this permit to the Department showing the received stamp from each County Clerk within 30 days of the issuance date.
- 4. **Notice of Construction:** You must notify the Department in writing at least 7 days before you begin any work approved by this permit by submitting the attached construction report. The Construction Reports are also available at www.nj.gov/dep/landuse.
- 5. Expiration date: All activities authorized by this permit must be completed by the expiration date shown on the first page unless otherwise extended by the Division. At that time, this permit will automatically become invalid and none of the approved work may begin or continue until a replacement permit is granted. (Some permits may qualify for an extension of the expiration date. Please contact the Department for further information.)

6. Rights of the State:

- a. This permit is revocable and subject to modification by the State with due cause.
- b. Representatives from the State have the statutory authority to enter and inspect this site to confirm compliance with this permit and may suspend construction or initiate enforcement action if work does not comply with this permit.
- c. This permit does not grant property rights. The issuance of this permit shall not affect any action by the State on future applications, nor affect the title or ownership of property, nor make the State a party in any suit or question of ownership.
- 7. Other responsibilities: You must obtain all necessary local, Federal and other State approvals before you begin work. All work must be stabilized in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey, and all fill material must be free of toxic pollutants in toxic amounts as defined in section 307 of the Federal Act.

SPECIAL CONDITIONS IN ADDITION TO THE STANDARD CONDITIONS:

Bayonne Energy Center, LLC
DLUR File No.: 0901-08-0001.1 WFD 080002-3
Page 3

- 8. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of this permit.
- 9. Consistency with the Areawide Water Quality Management Plan

The Division of Land Use Regulation has not reviewed this application for consistency with the Areawide Water Quality Management Plan and the issuance of this permit shall not be construed as an approval of any wastewater management plan for this project or site. There shall be no construction of any sewage generating structures unless and until the proposed development has been found to be consistent with the appropriate areawide water quality management plan.

- 10. Any regulated activities undertaken on the site before a copy of this recorded restriction is submitted to the Department will be considered in violation of the implementing rules and this permit
- 11. All necessary local, Federal, and other State approvals must be obtained by the applicant prior to the commencement of the herein-permitted activities. Approvals from the following may be required: The US Army Corps of Engineers and the Bureau of Tidelands Management, NJDEP for the proposed project.
- 12. All sediment barriers and other soil erosion control measures shall be installed prior to commencing any clearing, grading or construction onsite, and shall be maintained in proper working condition throughout the entire duration of the project.
- 13. In order to protect Shortnose Sturgeon within the Kill Van Kull, Upper New York Bay and Gowanus Bay, no in-water filling, pile-driving, or sediment generating activities are permitted within any watercourse onsite between March 1st through June 30th of each year. Furthermore, any activity outside a watercourse, which would likely introduce sediment into the watercourse and/or increase its turbidity, is also prohibited during this period. The Department reserves the right to suspend all regulated activities onsite should it be determined that the applicant has not taken proper precautions to ensure continuous compliance with this condition.
- 14. This area is a documented and suitable habitat for Shortnose Sturgeon, a federally listed endangered species. Therefore, the permittee shall report any new sturgeon sightings to the Endangered and Nongame Species Program, New Jersey Department of Environmental Protection at (609) 292-9400.
- 15. Mitigation is required for the State open water impacts associated the installation of the electric transmission cables that are located in an existing mitigation area approved under Division file No. 0901-02-0008.6 WFD 060002 on August 2, 2007. Therefore, within 30 days of the issuance of this permit, the permittee must submit a mitigation plan for these impacts to the Division of Land Use Regulation for review and approval. Prior to commencement of any regulated activities authorized by this permit, the Division must approve of the proposed mitigation project in writing. Failure to comply with this condition will subject the permittee to appropriate enforcement action.
- 16. The drawings hereby approved are seven (7) sheets, prepared by RPMS Consulting Engineers, all dated November 16, 2009, unrevised (unless otherwise noted), collectively entitled, "Bayonne Energy Center, LLC, Bayonne Energy Center Project, Submarine Transmission Cable Plans;"

[&]quot;Submarine Transmission Cable Route," DRAWING No. 1;

[&]quot;Upland Cable Route," DRAWING No. 2;

Bayonne Energy Center, LLC

DLUR File No.: 0901-08-0001.1 WFD 080002-3

Page 4

"New Jersey Landfall," DRAWING No. 3;

"Submarine Cable Route, Landfall Dredge Plan," DRAWING No. 5; and "Submarine Cable Route Details," DRAWING No. 6, last revised December 9, 2009.

"CLIENT/PROJECT TITLE, PURE ENERGY RESOURCES DEVELOPMENT, BAYONNE ENERGY CENTER, 401 HOOK ROAD, BAYONNE, NJ 07002, GENERAL ARRANGEMENT SITE PLAN, WORLEYPARSONS DWG. NO. BECP-1-DW-111-002-101," date signed November 16, 2009 and prepared by Worley Parsons.

PROJECT SPECIFIC DREDGING CONDITIONS:

- 17. Within 30 days of permit issuance, the permittee shall submit the following for review and approval:
 - A sampling and analysis plan for the material that will be removed from within the cofferdam.
 - A proposed sampling and analysis plan that will characterize the material in the newly added section of the transmission cable route. As a reference, the plan should be similar to the testing and analysis that was approved in the April 24, 2008, letter to Bryan C. Natale of the ESS Group, Inc.
- 18. Sediment data from the cofferdam and the transmission route shall be provided to the Office of Dredging and Sediment Technology 1 month prior to the commencement of dredging.
- 19. Dredging and coffer dam installation is prohibited from February 1st to May 31st of any given year in order to protect winter flounder early life stages.
- 20. Dredging of soft, fine-grained material shall be accomplished using a closed clamshell environmental bucket.
- 21. A closed clamshell environmental bucket shall be used until refusal at which time a clam shell digging bucket or dredge excavator may be used to complete the project.
- 22. The permittee shall employ the services of an independent dredging inspector to monitor dredging activities twice per week. The permittee shall submit the resume of the dredging inspector to the Department for review and receive written approval prior to the initiation of dredging.
- 23. The dredge shall be operated so as to control the rate of descent of the bucket so as to maximize the vertical cut of the clamshell bucket while not penetrating the sediment beyond the vertical dimension of the open bucket (i.e. overfilling the bucket). This will reduce the amount of free water in the dredged material, will avoid overfilling the bucket, and minimize the number of dredge bucket cycles needed to complete the dredging contract. The dredging contractor shall use appropriate software and sensors on the dredging equipment to ensure consistent compliance with this condition during the entire dredging operation. The independent dredging inspector shall monitor the operation of the software and sensors during the inspections required by Condition #34 of this authorization. Any malfunction of the software and sensors on the dredge at any time shall be immediately reported to the independent dredging inspector and the permittee by the dredging contractor and shall be immediately repaired to working order.

[&]quot;Submarine Cable Route," DRAWING No. 4;

Bayonne Energy Center, LLC DLUR File No.: 0901-08-0001.1 WFD 080002-3 Page 5

- 24. The closed clamshell environmental bucket shall be equipped with sensors to ensure complete closure of the bucket before lifting the bucket. Said sensors shall be operational during the entire dredging operation.
- 25. Where a closed clamshell environmental bucket is required, it shall be lifted slowly through the water, at a rate of 2 feet per second or less.
- 26. Dredged material shall be placed deliberately in the barge in order to prevent spillage of material overboard.
- 27. A "No Barge Overflow" applies to the dredging of Maintenance/Holocene sediments. "Barge Overflow" is permitted for the dredging of Pleistocene sediments only.
- 28. All barges or scows used to transport sediment shall be of solid hull construction or be sealed with concrete.
- 29. The gunwales of the dredge scows shall not be rinsed or hosed during dredging except to the extent necessary to ensure the safety of workers maneuvering on the dredge scow.
- 30. All decant water holding scows shall be water tight and of solid hull construction.
- 31. Decant water from this project may only be discharged within the Kill Van Kull in close proximity to the dredging contract area. Discharge to another receiving waterbody requires prior approval from the Department, and may require a New Jersey Discharge Pollutant Elimination System/Discharge to Surface Water (NJDPES/DSW) permit.
- 32. All decant water shall be held in the decant holding scow a minimum of 24 hours after the last addition of water to the decant holding scow. Said water contained in the decant holding scow may only be discharge after this mandatory 24 hour retention time.

Should the contractor wish to reduce the required holding time, the contractor shall demonstrate that the reduced holding time is sufficient to meet a total suspended solids (TSS) background value of 30 mg/L. This TSS action level is consistent with the ambient TSS results presented in the NY District study entitled "NY and NJ Harbor Deepening Project - Total Suspended Solids (TSS) Monitoring, Interim Report" (January 2006). The total suspended solids shall be determined through gravimetric analysis. No discharge shall be permitted from the decant holding scow until the results of the gravimetric analysis have confirmed that the 30 mg/L background level has been achieved. No additional water shall be added to the decant holding scow between the time of sample acquisition and discharge. Upon successful demonstration that the reduced holding time is sufficient to meet the TSS background level of 30 mg/L, the monitoring of TSS may be suspended and the demonstrated settling time shall replace the 24 hour minimum. A successful demonstration of the reduced holding time efficiency shall be determined once three consecutive TSS analyses have confirmed that the 30 mg/L action level has been achieved by the reduced holding time.

Should the contractor wish to demonstrate this reduced holding time, all records including time of last addition of decant water into the scow, time of TSS sampling and the results of TSS sampling shall be submitted to the NJDEP as soon as they become available, together with a request for a reduced holding time.

Bayonne Energy Center, LLC

DLUR File No.: 0901-08-0001.1 WFD 080002-3

Page 6

- 33. During pumping of the decant water from the holding scow, great care shall be taken to avoid resuspending or pumping sediment which has settled in the decant holding scow.
- 34. The dredging contractor shall complete and submit the attached Dewatering Form to the independent dredging inspector on a weekly basis as part of the Quality Control Report provided to the permittee. Said Dewatering Form shall be certified by the independent dredging inspector that they have witnessed the dewatering process during the preceding week. The permittee shall submit the completed Dewatering Form with appropriate certifications by fax to the Office of Dredging and Sediment Technology for the preceding week.
- 35. The independent dredging inspector shall perform inspections of the dredging contract a minimum of twice per week using the attached WQC Field Inspector form. The permittee shall submit the completed inspection forms to the NJDEP on at least a weekly basis.
- 36. REPORTING REQUIREMENTS: At the completion of this contract, the permittee shall submit the following information to the Department. This information shall be submitted within six months of contract completion.
 - Start and finish date of project
 - Post-dredge hydrographic survey
 - Completed "Notice of Completion of Work" attached.

ACCEPTABLE USE DETERMINATION

- 37. The permittee has provided the Department a conditional acceptance letter from Waste Management Grows for the 500 cubic yards of material that will be dredged from within the cofferdam.
- 38. All trucks used to transport processed dredged material to the above referenced placement sites shall be tarped pursuant to the applicable State DOT requirements or applicable regulatory agency requirements.
- 39. If the permittee elects to dispose/use the dredged material from this project at an alternate location, written authorization must be obtained from the Office of Dredging and Sediment Technology prior to the transport of any dredged material to said alternate disposal location. Any alternate disposal/use location must obtain all required state, local and federal permits before the Office would grant a modification of this permit to transport dredged material to the alternate location.

Christopher Jones, Manager

Bureau of Urban Growth and Redevelopment

C: City of Bayonne Construction Official

Gary Nickerson, Office of Dredging and Sediment Technology, NJDEP

Applicant w/ attachments

AMEC Earth & Environmental attn: Charles Harman w/ attachments

Hudson County Register's Office Willie L. Flood, County Register 257 Cornelison Avenue Jersey City, NJ 07302

Phone: 201-395-4760

Receipt for Services

Cashier	LHAMPTON					Batch	# 281115
÷				Date:	01/27/2010	Time:	02:46:48PM
Date	Instrument No	Document Type	Transaction Type				Pg/Amt
1/27/2010			DEED8712 554				6
Party 1:	BAYONNE ENERGY CENTER	LLC	Party 2:				
		DEED		Total:			90.00
		Fee Total:					90.00
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			Payment Total:				90.00



Jon S. Corzine *Governor*

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mark N. Mauriello Acting Commissioner

Division of Air Quality
Bureau of Operating Permits
401 E. State Street, 2nd floor, P.O. Box 27
Trenton, NJ 08625-0027

FACT SHEET

FOR

Bayonne Energy Center, LLC

APPLICATION FOR

TITLE V AIR OPERATING PERMIT

AND

ACID RAIN PERMIT

FOR

Bayonne Energy Center, LLC

512 MW SIMPLE CYCLE POWER GENERATING FACILITY
BAYONNE (HUDSON COUNTY), NEW JERSEY

John Precewski, P.E., Assistant Director Bureau of Operating Permits

Date: June ----, 2009

Table of Contents

- A. <u>Summary</u>
- B. <u>Air Contaminant Emissions</u>
- C. <u>Air Pollution Control Technologies</u>
- D. Applicable Regulations
- E. <u>Air Quality Effects</u>
- F. <u>Testing and Monitoring Requirements</u>

A. SUMMARY

Bayonne Energy Center, LLC (BEC) is proposing a combined Title V Operating Permit and an Acid Rain Permit to construct and operate the Bayonne Energy Center (BEC), a maximum 512 MW simple-cycle power generating facility located in the township of Bayonne, NJ. The project will be situated in the Constable Hook region of eastern Bayonne, Hudson County, NJ, on a 7 acre vacant waterfront industrial space.

The BEC facility would consist of eight identical Rolls Royce Trent 60WLE (64 MW) simple cycle combustion turbines, one emergency black start generator (1 MW) and one diesel fire pump (210 HP) and other ancillary equipment.

Each turbine will be exhausting through a 151 foot exhaust stack. The primary fuel for the combustion turbine would be natural gas. Ultra Low Sulfur Distillate (ULSD) oil with sulfur content of less than or equal to 15 ppm would be back up fuel for the combustion turbines. Each turbine is rated at 603 million British thermal unit per hour higher heating value (MMBtu/hr HHV) (total 4,824 MMBtu/hr for eight turbines) when burning natural gas and 538 MMBtu/hr (total 4,304 MMBtu/hr for eight turbines) when burning ULSD.

Each combustion turbine will utilize natural gas for a maximum of 4,748 hours per year and ULSD for a maximum of 720 hours per year during times of natural gas curtailment. There will be a restriction on the use of ULSD for a maximum of 13.5 hours per day in order to comply with the particulate matter with a diameter of less than 2.5 microns ($PM_{2.5}$) Significant Impact Level of 2 μ g/m³. The proposed maximum annual capacity factor for the facility is 54 percent.

Each combustion turbine will be equipped with a Selective Catalytic Reduction (SCR) and wet low nitrogen oxides (NO_x) emissions technology for control of NO_x emissions to 2.5 ppm during natural gas firing and 5.0 ppm during ULSD firing. Each combustion turbine will also be equipped with an oxidation catalyst for control of CO emissions to 5.0 ppm for both natural gas firing and ULSD firing, and to control VOC emissions to 2.5 ppm during natural gas firing and 4.5 ppm during ULSD firing.

Auxiliary equipment includes storage tanks, four fin fan coolers, two electric natural gas coolers and an on-site water treatment system

B. AIR CONTAMINANT EMISSIONS

Table 1 lists proposed emissions of all criteria pollutants in pounds per hour (lbs/hr), parts per million on dry volume basis at 15% oxygen (ppmdv @ 15% O2), and pounds per million British thermal units (lbs/MMBtu). The proposed emission limits from the combustion turbines would be achieved after the application of air pollution control technologies that are discussed in Section C.

TABLE 1

MAXIMUM ALLOWABLE EMISSIONS FOR EACH COMBUSTION TURBINE/HRSG UNIT (Operating Conditions: 100% load; - 59°F ambient temperature) (Baseload Operations)

Air Contaminant	Maximum Allowable Hourly	Emissions
	Natural Gas	<u>ULSD</u>
Nitrogen Oxides (as NO ₂)		
lbs/hr ¹	5.55	10.45
ppmdv @ $15\% O_2^2$	2.50	5.00
lbs/MMBtu ³	0.0092	0.019
Carbon Monoxide (CO)		
lbs/hr	6.76	6.40
ppmdv @ 15% O ₂	5.00	5.00
lbs/MMBtu	0.0112	0.0118
Non-Methane organic Compounds (including	g VOCs)	
lbs/hr	1.93	3.27
ppmdv @ 15% O ₂	2.50	4.50
lbs/MMBtu	0.0032	0.0061
Sulfur Oxides (SO ₂)		
lbs/hr	1.20	0.80
lbs/MMBtu	0.002	0.0015
Total Suspended Matter (TSP)		
lbs/hr	5.00	15.00
lbs/MMBtu	0.0083	0.028
PM_{10}		
lbs/hr	5.00	15.00
lbs/MMBtu	0.0083	0.028
$PM_{2.5}$		
lbs/hr	5.00	15.00
lbs/MMBtu	0.0083	0.028
Ammonia (NH ₃)		
ppmdv @ 15% O ₂	5.00	5.00
lbs/MMBtu	0.0068	0.0068
Formaldehyde		
lbs/hr	0.576	

NOTES:

- 1. lbs/hr = Pounds per hour emissions per turbine.
- 2. ppmvd (@ 15% O₂) = parts per million by volume on a dry basis (corrected to 15 percent oxygen).
- 3. lbs/MMBtu (HHV) = Pounds of contaminant per million BTU (HHV) heat input at higher heating value (HHV) of the fuel based on worst-case normal operating conditions.

Based on the potential annual emissions in Table 2 (given in tons per year), the facility is considered a new major Non Attainment New Source Review (NSR) source for emissions of NO_x and VOC. This is because the potential emissions of NO_x and VOC, which are ozone precursors, are greater than 25 tons per year (the threshold for a severe ozone non-attainment area, which applies to the entire state of New Jersey).

Totential Emissions, PSD Significant Em Thresholds	ABLE 2 ission Rate and Non-attainn	nent NSR
Pollutant	Proposed Maximum Potential Emissions from BEC (TPY) ¹	Non-Attainment NSR Threshold Criteria (TPY)
Carbon Monoxide (CO)	130.36	NA
Nitrogen Oxides (NO _x)	109.51	25
Sulfur Dioxide (SO ₂)	23.23	N/A
Particulate Matter (PM/TSP)	94.99	N/A
PM-10	94.99	N/A
PM-2.5	94.99	100
Ozone (Volatile Organic Compounds (VOC))	36.82	25
Lead	0.02	N/A

NOTE:

- ¹ Maximum potential to emit calculations are based on the following operating scenario
- For eight turbines: 4,748 hours of natural gas-fired combustion turbine operation with no increase in emissions during start-up/shutdown operation.
- For emergency diesel generator: 500 hours per year, and,
- For diesel firewater pump: 500 hours per year.

C. AIR POLLUTION CONTROL TECHNOLOGIES

The facility is required to evaluate Lowest Achievable Emission Rate (LAER) for each NSR pollutant (NO_x and VOC). LAER is the most stringent emission limitation contained in the implementation plan of any State for a particular source category, or which is achieved in practice by a particular source category, whichever is most stringent.

1. Nitrogen Oxide (NO_x) Control Technologies

Nitrogen oxides are formed during the combustion of fuel in the turbine and are generally classified as either thermal NO_x or fuel-related NO_x . Thermal NO_x results when atmospheric nitrogen is oxidized at high temperatures to yield nitrogen oxide (NO), nitrogen dioxide (NO₂) and other oxides of nitrogen. The rate of formation is proportional to temperature in the combustion chamber. Fuel-related NO_x is formed from the oxidation of chemically bound nitrogen in the fuel. Fuel-related NO_x is minimal for natural gas combustion; NO_x emissions from the combustion of natural gas are primarily from thermal NO_x . Distillate oil does contain some chemically bound nitrogen, and NO_x emissions from oil combustion are comprised of both thermal and fuel-related NO_x .

BEC evaluated the following technologies for controlling NO_x emissions from the proposed combustion turbines:

Selective Catalytic Reduction (SCR)
Water/Steam Injection
Wet Low-Emission (WLE) Combustors

Reduction in NO_x emissions can be achieved using combustion controls and/or flue gas treatment. Available combustion controls include water or steam injection and low emission combustors. Back-end controls remove NO_x from the exhaust gas stream once NO_x has been formed. SCR, using ammonia as a reagent, represents the current state-of-the-art for back-end gas turbine controls and is the flue gas treatment most commonly used for combustion turbines operating in both simple- and combined-cycle mode. Where technically feasible, SCR is considered the most stringent level of control.

BEC selected wet low-NO_x combustors (WLE) with water injection to control NO_x emissions in the turbines' exhaust gases to 25 ppmvd corrected to 15 percent O_2 when firing natural gas and 42 ppmvd corrected to 15 percent O_2 when firing ULSD oil. In addition, the exhaust gases from the combustion turbine will pass through an ammonia injection grid with an SCR catalyst for further NO_x control. The catalyst will be housed in the ductwork at the turbine exhaust, prior to the exhaust stack. The SCR is expected to achieve up to a maximum of 90 percent and 88 percent removal efficiency of NO_x when firing natural gas and ULSD, respectively. This corresponds to maximum controlled NO_x emissions of 2.5 ppmvd and 5.0 ppmvd corrected to 15 percent O_2 for natural gas and ULSD firing, respectively.

a. Description of Control Technologies

Selective Catalytic Reduction (SCR)

Selective catalytic reduction (SCR) is a process in which ammonia is injected directly into the flue gas and then passed over a catalyst to react with NO_x , converting the NO_x and ammonia to nitrogen and water. This reaction typically takes place at temperatures in the range of 550 °F to 850 °F.

Wet Low-NOx Combustors

Wet Low- NO_x uses water injection to lower flame temperatures, thus reducing the amount of thermal NO_x formation. Once injected, the water vaporizes and absorbs some of the heat of combustion. This lowers peak flame temperature which in turn reduces the amount of thermal NO_x that is formed.

NO_x Controls for Combustion Turbines

• WLE Combustion with Selective Catalytic Reduction (SCR)

BEC has proposed to install a WLE combustion system on the combustion turbines, along with SCR to achieve an emission limitation of 2.5 ppmdv, corrected to 15% O₂ on natural gas. When operating on ULSD fuel oil, combustion turbines will utilize water injection along with SCR to achieve an emission limitation of 5.0 ppmdv, corrected to 15% O₂ on ULSD. The Department has compared the proposed emission limitation with emission limitations of similar sized combustion turbines having SCR and DLN or WLE in the RACT/BACT/LAER Clearinghouse (RBLC) and found the emissions to be minimal and approvable as LAER. SCR has been used on hundreds of gas turbine applications throughout the United States and the world, and is a proven technology for the control of NO_x emissions from gas turbines.

NO_x controls for Ancillary Sources

BEC has proposed NO_x emission limitations for the emergency diesel-fired electric generator, and emergency diesel-fired fire-water pump.

The engine-driven emergency generator and fire-water pump will operate on ULSD exclusively. The proposed NO_x emission limit for the emergency diesel engine-driven electric generator is 13.9 lbs/hr or 3.47 TPY, and, for the diesel engine-driven fire-water pump, the limit is 2.3 lbs/hr or 0.57 TPY. In addition, both engines will comply with the New Source Performance Standards: *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* (40 CFR 60 Subpart IIII). The Department has reviewed these and found the proposed emission limitations to be LAER.

2. Volatile Organic Compound (VOC) Control Technologies

a. Combustion Turbines

The most stringent VOC control levels for combustion turbines has been achieved with advanced low NO_x combustors and/or catalytic oxidation for carbon monoxide (CO) control. BEC is proposing the installation of an oxidation catalyst for CO control which will also reduce VOC emissions. The proposed VOC emissions limits when burning natural gas are 2.5 ppmdv corrected to 15% O_2 at 100% load. The proposed VOC emissions limits when burning ULSD are 4.5 ppmdv corrected to 15% O_2 at 100% load. The Department has searched the RBLC for VOC emission limitations of similar sized combustion turbines and found the proposed VOC emission limitations to be LAER.

b. Ancillary Sources

BEC has proposed VOC emission limitations for the emergency diesel-fired electric generator, and emergency diesel-fired fire-water pump. The proposed VOC emission limit for the emergency diesel-fired emergency generator is 0.03 lbs/hr or 0.01 TPY). The proposed VOC emission limitation for the emergency diesel-fired fire-water pump is 0.08 lbs/hr or 0.02 TPY). In addition, both engines will comply with the New Source Performance Standards: *Standards of*

Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60 Subpart IIII). The Department has reviewed these and found the proposed VOC emission limitations to be LAER.

D. APPLICABLE REGULATIONS

1. Non-Attainment New Source Review (NSR)

The BEC was determined to be subject to Non-attainment New Source Review (NSR) for emissions of NO_x and VOC as the potential emissions of these two ozone precursors are greater than 25 tons per year (the threshold for severe ozone non-attainment, which applies to the entire state of New Jersey).

Applicable requirements include application of LAER technology and acquisition of emission offsets. The minimum offset ratio is 1.3:1 for both NO_x and VOC, per N.J.A.C. 7:27-18.5. The use of emission reduction credits to offset NO_x and VOC emissions must be within 100 miles for the 1.3:1 ratios to apply. BEC has indicated that it intends to acquire the required NO_x and VOC emission reduction credits (ERCs) from sources within 100 miles of the BEC. Therefore, multiplying the potential to emit (PTE) by 1.3 results is a requirement for 142.36 tons per year (tpy) of NO_x (PTE = 109.51 tpy) offsets, and 47.87 tons of VOC (PTE = 36.82 tpy) offsets. These offsets must be acquired before the startup of the facility.

In accordance with N.J.A.C. 7:27-18.3(c)2, BEC has conducted an analysis of alternative sites within New Jersey and considered alternative sizes, production processes, including pollution prevention measures and environmental control techniques, demonstrating that the benefits of the newly constructed BEC outweigh the environmental and social costs imposed as a result of the location, construction, and operation of the BEC. The Department has found that the benefits of the BEC will significantly outweigh the environmental and social costs imposed as a result of construction and operation of the BEC.

2. Other Regulatory Requirements

a. Federal Regulations

New Source Performance Standards (NSPS)

The BEC is subject to the following NSPS codified at 40 CFR 60:

- Subpart IIII, the NSPS for stationary CI internal combustion engine, and
- Subpart KKKK, the NSPS for stationary gas turbines.

The emission limitations proposed by the BEC as shown in Table 1 and discussed in Section C satisfy the NSPS requirements.

Acid Rain Program

The Acid Rain Permit is proposed pursuant to the air pollution control permit provisions of Title IV of the federal Clean Air Act, federal rules promulgated at 40 CFR 72, and state regulations promulgated at N.J.A.C. 7:27-22. These rules require facilities operating "affected units" that are subject to the Acid Rain Program to obtain an Acid Rain Permit for those units. Pursuant to Title IV of the Clean Air Act, the United States Environmental Protection Agency (USEPA) has not previously approved sulfur dioxide (SO₂) allowances for the eight units, GT1 through GT8, proposed for BEC. Each SO₂ allowance provides authorization to emit up to one ton of sulfur dioxide during a specified calendar year. In accordance with USEPA's rules, BEC may sell or purchase allowances on the open market in order to more accurately reflect actual facility operation. The total number of SO₂ allowances allocated to the referenced units are as follows: Unit GT1: 0, Unit GT2: 0, Unit GT3: 0, Unit GT4: 0, Unit GT5: 0, Unit GT6: 0, Unit GT7: 0, Unit GT8: 0. These allocations are valid for the calendar years 2009 through 2014. The Designated Representative for this facility is Paul Barnett.

National Ambient Air Quality Standards

The National Ambient Air Quality Standards (NAAQS) are codified at 40 CFR 50. The dispersion modeling analysis discussed in Section E, demonstrates compliance with the NAAQS requirements.

Maximum Achievable Control Technology (MACT)

The Bayonne Energy Center will not be a major source of Hazardous Air Pollutants (HAPs), including formaldehyde. Since the Bayonne Energy Center is not a major source of HAPs, it is not subject to MACT standards. Formaldehyde would be the single HAP with highest estimated annual emission rate from BEC. BEC assumes that the formaldehyde emissions from all 8 turbine would be 8.14 tpy.

In 2004, EPA also promulgated National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for Stationary Reciprocating Internal Combustion Engines in 40 CFR 63 Subpart ZZZZ. Revisions to Subpart ZZZZ promulgated January 18, 2008 included reciprocating internal combustion engines located at HAP "area sources." As previously discussed, the Project is not a major source of HAPs. However, the Project would be subject to NESHAP Subpart ZZZZ as an "area source". By complying with NSPS Subpart IIII, the Project will also satisfy the requirements of Subpart ZZZZ.

b. New Jersey Regulations

The facility is subject to New Jersey Air Pollution Control Regulations, codified in N.J.A.C. 7:27-1 et seq. for air pollution control, and the New Jersey Ambient Air Quality Standards (NJAAQS). The Department is satisfied that the proposed emission rates in Table 1 and Table 2 satisfy the New Jersey regulations.

E. AIR QUALITY EFFECTS

The Department reviewed the ambient air quality impact of the proposed project. Based on the air quality modeling analysis, the Department found that air contaminant emissions from the proposed Facility will not exceed Federal or New Jersey Ambient Air Quality Standards or PSD

increments. The source's Class I impacts at the Brigantine National Wildlife Refuge will be within allowable EPA Class I increments, and below Class I area Significant Impact Levels (SILs).

The memorandum of the air dispersion modeling and risk assessment summary from Bureau of Technical Services, dated March 5, 2009, is attached.

F. TESTING AND MONITORING REQUIREMENTS

The BEC will be required to conduct stack testing to demonstrate the ability of the facility to operate within the approved emission limitations. In addition, Continuous Emission Monitors (CEM) and recorders for NO_x and CO will be required. The scope of the stack testing and CEMS is detailed in the draft compliance plan.



State of New Jersey

Jon S. Corzine *Governor*

DEPARTMENT of ENVIRONMENTAL PROTECTION

Lisa P. Jackson Commissioner

Environmental Regulation Bureau of Operating Permits 401 E. State Street, 2nd floor, P.O. Box 27 Trenton, NJ 08625-0027

Air Pollution Control Operating Permit

Permit Activity Number: BOP080001

Program Interest Number: 12863

Mailing Address	Plant Location
PAUL A BARNETT	BAYONNE ENERGY CTR
PURE ENERGY RESOURCES LLC	410 Hook Rd
25 MALL RD - STE 100	Bayonne City
BURLINGTON, MA 01886	Hudson County

Operating Permit Approval Date: September 24, 2009
Operating Permit Expiration Date: September 23, 2014

This initial operating permit is approved and issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). Equipment at the facility must be operated in accordance with the requirements of this permit.

This operating permit includes a permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. However, this permit shield does not alter or affect the liability of the owner or operator of the facility for any violations of any applicable requirement of the Prevention of Significant Deterioration (PSD) rule codified at 40 CFR § 52.21, prior to or at the time of permit issuance. This permit shield also does not relieve the owner or operator of the facility of its obligation to seek a PSD applicability determination from the Department and/or the United States Environmental Protection Agency if required to do so for certain physical changes or changes in the method of its operation. This operating permit does not include compliance schedules as part of the approved compliance plan.

The permittee shall submit to the Department and to the EPA on forms provided by the Department, at the addresses given below, a periodic compliance certification, in accordance with N.J.A.C. 7:27-22.19 and the schedule for compliance certifications set forth in the compliance plan in this operating permit. The annual compliance certification reporting period will cover the calendar year ending December 31. The annual compliance certification is due to the Department and the EPA within 60 days after the end of each calendar year during which this permit was in effect. Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm.

The annual compliance certification report may also be considered as your six month deviation report for the period from July 1 through December 31, which is due by January 30 of each year, as required by paragraph 13 in Section F, *General Provisions and Authorities*, of this permit, if the annual compliance certification is submitted by January 30.

New Jersey Department of Environmental Protection Air & Environmental Quality Compliance & Enforcement 401 East State Street, P. O. Box 422 Trenton, New Jersey 08625-0422

New Jersey Department of Environmental Protection Air and Environmental Quality Compliance & Enforcement Northern Regional Enforcement Office at 7 Ridgedale Avenue, Cedar Knolls, New Jersey, 07927 United States Environmental Protection Agency, Region II Air Compliance Branch 290 Broadway New York, New York 10007-1866

Approved by:

Aliya M. Khan Bureau of Air Permits

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

TABLE OF CONTENTS

REASON FOR PERMIT
Section B
<u>DEFINITIONS</u>
Section C
POLLUTANT EMISSIONS SUMMARY
Section D
POLLUTION PREVENTION REPORTING
Section E
GENERAL PROVISIONS AND AUTHORITIES
Section F
STATE-ONLY APPLICABLE REQUIREMENTS
Section G
COMPLIANCE PLAN AND INVENTORIES
<u>ATTACHMENTS</u>

ACID RAIN PERMIT

Section A

Section A

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

REASON FOR PERMIT

The reason for issuance of this permit is to comply with the air pollution control permit provisions of Title V of the federal Clean Air Act, federal rules promulgated at 40 CFR 70, and state regulations promulgated at N.J.A.C. 7:27-22, which require the state to issue operating permits to major facilities. This is the operating permit for the facility listed on the cover page.

New Jersey has elected to integrate its Title I New Source Review (NSR) preconstruction permits with the new Title V operating permits instead of issuing separate permits.

This permit action consolidates previously approved permit terms and conditions into one single permit for the facility. The New Jersey Department of Environmental Protection (Department) issues this operating permit authorizing the facility to operate equipment and air pollution control devices. In the operating permit application, the facility represented that it meets all applicable requirements of the federal Clean Air Act and the New Jersey Air Pollution Control Act codified at N.J.S.A. 26:2C. Based on an evaluation of the data contained in the facility's application, the Department has approved this operating permit.

This permit allows this facility to operate the equipment and air pollution control devices specified in this permit and emit up to a level specified for each source operation. The signatories named in the application are responsible for ensuring that the facility is operated in a manner consistent with this permit, its conditions, and applicable rules.

Section B

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

DEFINITIONS

The terms used in this permit are used consistent with the definitions at N.J.A.C. 7:27-1 and N.J.A.C. 7:27-22. Any terms defined in this section are not defined at N.J.A.C. 7:27-1 or N.J.A.C. 7:27-22, and are needed for clarifying the permit.

"Permitting Authority" means the New Jersey Department of Environmental Protection (NJDEP).

"The EPA," or "the Administrator," means the Administrator of the EPA or his designee.

"M" preceding a unit of measure means one thousand. For example, "10 M gal." means ten thousand gallons.

"MM" preceding a unit of measure means one million. For example, "10 MM gal." means ten million gallons.

"Grandfathered" means, in reference to equipment or control apparatus, that construction, reconstruction, or modification occurred prior to enactment of N.J.S.A. 26:2C-9.2 on June 15, 1967, or prior to the subsequent applicable revisions to rules and regulations codified at N.J.A.C. 7:27-8 that occurred March 5, 1973, June 1, 1976, April 5, 1985, and October 31, 1994, and no construction, reconstruction, or modification of the equipment or control apparatus has occurred since.

"Compliance Plan" means the applicable requirements, monitoring requirements, recordkeeping requirements, and submittal/action requirements detailed in Section J, Facility Specific Requirements, of the operating permit.

Section C

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

POLLUTANT EMISSIONS SUMMARY

The following table indicates the facility's Potential to Emit (PTE) emissions summary:

			Fac	•	al Potenti ns per yea		it		
Source Categories			Prima	ary			S	Secondar	у
	VOC (total)	NO _x	СО	SO ₂	TSP (total)	Other (total)	PM ₁₀ (total)	Pb	HAPs (total)
Emission Unit Summary	36.82	109.51	130.36	23.23	94.99	6.97	94.99	0.022	11.77
Batch Process Summary	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-Source Fugitive Emissions ¹	NA	NA	NA	NA	NA	NA	NA	NA	NA
Group Summary	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Emissions ²	36.82	109.51	130.36	23.23	94.99	6.97	94.99	0.022	11.77

VOC Volatile Organic Compounds PM_{10} Particulates under 10 microns

 NO_x Nitrogen Oxides Pb Lead

CO Carbon Monoxide Hazardous Air Pollutants **HAPs**

Sulfur Dioxide SO_2

TSP Total Suspended Particulates

Other Any other air contaminant regulated under the Federal Clean Air Act (Sulfuric acid)

 $^{^1}$ Not applicable to this facility. 2 Total emissions from this facility do not include emissions from Insignificant Sources.

Section C

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

POLLUTANT EMISSIONS SUMMARY

The following table indicates the facility's hazardous air pollutants (HAP) emissions summary:³

HAP	TPY
Acrolein	0.07
Formaldehyde	8.14
Manganese	1.22

³ Do not sum these values for the purpose of establishing a total HAP potential to emit. See previous page for the allowable total HAP emissions.

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Section D

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

POLLUTION PREVENTION REPORTING

General Pollution Prevention Conditions

The following evaluation requirements are included to track the facility's progress in several critical areas identified in the National Environmental Performance Partnership System (NEPPS). Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOC) are precursors to the air pollutant Ozone, for which New Jersey is non-attainment with the air quality standard for the protection of public health. The control of hazardous air pollutants (HAPs) is also a focus item for the next decade in order to minimize localized hot spots and general urban air toxics levels. Therefore, the Department is requiring evaluation of emission trends at 5-year intervals for major sources of these air contaminants. Also, as part of significant modification applications, proposed major increases of these air contaminants requires evaluation of pollution prevention and cross media effects.

The evaluation of these trends requires no increased monitoring. Rather it utilizes existing monitoring data, as reported annually in Emission Statements (for NOx and VOC) and annual Release and Pollution Prevention Reports (for HAPs). The intent of this evaluation is to better utilize the existing data by having the company, the public and the Department review major source trends periodically, as part of the 5-year renewal review and public comment process. The Department requests that the facility-wide trends be presented on graphs for attachment to the public information document for the 5-year renewal.

Pollution prevention includes changes that result in the reduction in use or generation of non-product output per unit of product. Cross media effects are practices that result in transferring the ultimate release or disposal of a contaminant from one environmental medium (e.g. air) to another environmental medium (e.g. water, solid or hazardous wastes).

<u>Information to include with the renewal application:</u>

- 1. The facility will evaluate annual emission trends over the last five years for actual air contaminant emissions of Volatile Organic Compounds (VOC), Nitrogen Oxides (NOx), if the facility's potential to emit VOC or NOx is greater than 25 tons per year, or any Hazardous Air Pollutants (HAP), for which the facility's potential to emit is greater than 10 tons per year. The VOC and NOx emission data should reflect annual emission statement reports submitted pursuant to N.J.A.C. 7:27-21, and the HAP emissions data should reflect the annual Release and Pollution Prevention Report submitted pursuant to N.J.A.C. 7:1G-4 and 5 and N.J.A.C. 7:1K-6. Although not required, the Department encourages the facility to explain the reason for any significant trend, including whether it is the result of cross media shifts (to air, water, or solid waste) and/or pollution prevention. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.
- 2. The facility will summarize annual potential to emit limits (<u>allowable</u> emissions) for VOC, NOx, and HAPs, which are subject to reporting under 1 above, for the last five years. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.
- 3. The facility will summarize five-year trends in annual VOC, NOx, and HAP emissions, which are subject to reporting under 1 above, on a pound per unit of product basis, based on annual actual emissions and annual

- production over the five year period. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.
- 4. The facility will discuss five-year trends in actual air contaminant emissions of non-source VOC and HAP fugitives, which are subject to reporting under 1 above; explain measures taken to minimize such fugitives; and provide an explanation for any significant changes.

<u>Information to include with an application for a Significant Modification to this permit:</u>

1. For any significant modifications, the facility is encouraged to explain any cross media shifts of VOC and HAP air contaminants as part of the significant modification application. If an explanation is provided, the facility should identify the pollutant and the specific environmental media to which the pollutant is anticipated to be transferred, whether it be from air to solid waste or water, or from water or solid waste to the air.

Section E

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

GENERAL PROVISIONS AND AUTHORITIES

Operating Permits

- 1. No permittee shall allow any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in a quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or which would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant which occurs only in areas over which the permittee has exclusive use or occupancy. Conditions relative only to nuisance situations, including odors, are not considered Federally enforceable. [N.J.A.C. 7:27-22.16(g)8]
- 2. Any deviation from operating permit requirements which results in a release of air contaminants shall be reported to the Department as follows:

If the air contaminants are released in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints, the permittee shall report the release to the Department:

- i. Immediately on the Department hotline at 1-877-927-6337, pursuant to N.J.S.A. 26:2C-19(e); and
- ii. As part of the compliance certification required in N.J.A.C. 7:27-22.19(f). However, if the deviation is identified through source emissions testing, it shall be reported through the source emissions testing and monitoring procedures at N.J.A.C. 7:27-22.18(e)3; or

If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, the permittee shall report the release to the Department as part of the compliance certification required in N.J.A.C. 7:27-22.19(f), except for deviations identified by source emissions testing reports, which shall be reported through the procedures at N.J.A.C. 7:27-22.18(e)3; or

If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, and the permittee intends to assert the affirmative defense afforded by N.J.A.C. 7:27-22.16(l), the violation shall be reported by 5:00 P.M. of the second full calendar day following the occurrence, or of becoming aware of the occurrence, consistent with N.J.A.C. 7:27-22.16(l). [N.J.A.C. 7:27-22.19(g)]

- 3. The permittee shall comply with all conditions of the operating permit including the approved compliance plan. Any non-compliance with a permit condition constitutes a violation of the New Jersey Air Pollution Control Act N.J.S.A. 26:2C-1 et seq., or the CAA, 42 U.S.C. §7401 et seq., or both, and is grounds for enforcement action; for termination, revocation and reissuance, or for modification of the operating permit; or for denial of an application for a renewal of the operating permit. [N.J.A.C. 7:27-22.16(g)1]
- 4. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of its operating permit. [N.J.A.C. 7:27-22.16(g)2]

- 5. This operating permit may be modified, terminated, or revoked for cause by the EPA pursuant to 40 CFR 70.7(g) and revoked or reopened and modified for cause by the Department pursuant to N.J.A.C. 7:27-22.25. [N.J.A.C. 7:27-22.16(g)3]
- 6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]
- 7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]
- 8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]
- 9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]
- 10. The Department and its authorized representatives shall have the right to enter and inspect any facility subject to N.J.A.C. 7:27-22, or portion thereof, pursuant to N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-22.16(g)9]
- 11. The permittee shall pay fees to the Department pursuant to N.J.A.C. 7:27. [N.J.A.C. 7:27-22.16(g)10]
- 12. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date that each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]
- 13. In accordance with N.J.A.C. 7:27-22.19(c) and 22.19(d) 3, each permittee shall submit to the Department, on forms provided by the Department, a six month deviation report relating to testing and monitoring required by the operating permit, not including information for testing and monitoring which have other reporting schedules specified in the permit. Normally, stack testing reporting is submitted within 45 days of test completion and continuous monitoring reporting is done quarterly. The six month report must address other specified monitoring, including, but not limited to, continuous and periodic monitoring data required by this permit. (See column two and three entitled "Monitoring Requirement" and "Recordkeeping Requirement," respectively, in the Facility Specific Requirement Section of this permit.). The six month reports for the testing and monitoring performed from January 1 through June 30, shall be reported by July 30 of the same calendar year; or from July 1 through December 31, shall be reported by January 30 of the following calendar year. Pursuant to N.J.A.C. 7:27-22.19(e), these six month reports shall clearly identify all deviations from operating permit requirements, the probable cause of such deviations, and any corrective actions taken. Any "None" listed in the Submittal/Action Requirement in the Operating Permit is not intended to override the six-month deviation report. The report shall be certified pursuant to N.J.A.C. 7:27-1.39 by a responsible official. Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm. [N.J.A.C. 7:27-22.19(d)3 and N.J.A.C. 7:27-22.19(e)]

An annual compliance certification required by paragraph 2 above and required by N.J.A.C. 7:27-22.19(f) may also be considered as your six month deviation report for the period from July 1 through December 31, which is due by January 30 of each year, if the annual compliance certification is submitted by January 30.

14. For emergencies (as defined at 40 CFR 70.6(g)(1)) that result in non-compliance with any promulgated federal technology-based standard such as NSPS, NESHAPS, or MACT, a federal affirmative defense is available, pursuant to 40 CFR 70. To assert a federal affirmative defense, the permittee must use the procedures set forth in 40 CFR 70. The affirmative defense provisions described in 15 below may not be

applied to any situation that caused the Facility to exceed any federally delegated regulation, including but not limited to NSPS, NESHAP, or MACT.

- 15. For situations other than those covered by 14 above, an affirmative defense is available for a violation of a provision or condition of the operating permit only if:
 - i. The violation occurred as a result of an equipment malfunction, an equipment start-up or shutdown, or during the performance of necessary equipment maintenance; and
 - ii. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C-19.1 through 19.5 and any implementing rules. [N.J.A.C. 7:27-22.16(1)]
- 16. Each permittee shall meet all requirements of the approved source emissions testing and monitoring protocol during the term of the operating permit. [N.J.A.C. 7:27-22.18(j)]

The following paragraphs of this section are included for the permittee's convenience to remind them of their obligations with certain key applicable requirements. These paragraphs are not enforceable since they paraphrase areas of the operating permits rule. Also, these paragraphs do not reference all the applicable requirements with which the permittee must comply.

- 17. Each owner and each operator of any facility, source operation, or activity to which this permit applies is responsible for ensuring compliance with all requirements of N.J.A.C. 7:27-22. If the owner and operator are separate persons, or if there is more than one owner or operator, each owner and each operator is jointly and severally liable for any fees due under N.J.A.C. 7:27-22, and for any penalties for violation of N.J.A.C. 7:27-22.
- 18. In the event of a challenge to any part of this operating permit, all other parts of the permit shall continue to be valid.
- 19. The permittee shall ensure that no air contaminant is emitted from any significant source operation at a rate, calculated as the potential to emit, that exceeds the applicable threshold for reporting emissions set forth in the Appendix to N.J.A.C. 7:27-22, unless emission of the air contaminant is authorized by this operating permit.
- 20. Consistent with the provisions of N.J.A.C. 7:27-22.3(e), the permittee shall ensure that all requirements of this Operating Permit are met. In the event that there are multiple emission limitations, monitoring, recordkeeping, and/or reporting requirements for a given source operation, the facility must comply with all requirements, including the most stringent.
- 21. Consistent with the provisions of N.J.A.C. 7:27-22.9(c), the permittee shall use monitoring of operating parameters, where required by the compliance plan, as a surrogate for direct emissions testing or monitoring, to demonstrate compliance with applicable requirements.
- 22. The permittee shall file a timely and complete application for:

Administrative Amendments; Seven-Day-Notice changes; Minor Modifications; Significant Modifications; and Renewals.

Section F

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

STATE-ONLY APPLICABLE REQUIREMENTS

N.J.A.C. 7:27-22.16(b)5 requires the Department to specifically designate as not being federally enforceable any permit conditions based only on applicable state requirements. The applicable state requirements to which this provision applies are listed in the table titled "State-Only Applicable Requirements."

STATE-ONLY APPLICABLE REQUIREMENTS

The following applicable requirements are not federally enforceable:

<u>SECTION</u>	SUBJECT ITEM	ITEM#	<u>REF. #</u>
F		15	
J	FC		3
J	FC		10

Section G

Facility Name: BAYONNE ENERGY CTR Program Interest Number: 12863 Permit Activity Number: BOP080001

COMPLIANCE PLAN AND INVENTORIES

- FACILITY SPECIFIC REQUIREMENTS PAGE INDEX
- FACILITY SPECIFIC REQUIREMENTS (COMPLIANCE PLAN)
- FACILITY PROFILE (ADMINISTRATIVE INFORMATION)
- REASON FOR APPLICATION
- INSIGNIFICANT SOURCE EMISSIONS
- EQUIPMENT INVENTORY
- CONTROL DEVICE INVENTORY
- EMISSION POINT INVENTORY
- EMISSION UNIT/BATCH PROCESS INVENTORY
- SUBJECT ITEM GROUP INVENTORY
- POTENTIAL TO EMIT
- EQUIPMENT DETAILS
- CONTROL DEVICE DETAILS
- ADDITIONAL WORD/EXCEL/PDF DOCUMENTS ACID RAIN PERMIT

Facility Name: BAYONNE ENERGY CTR Facility ID No.: 12863 Activity ID No.: BOP080001

FACILITY SPECIFIC REQUIREMENTS – PAGE INDEX

Facility (FC): 1 FC 1 Insignificant Sources (IS): 5 IS1 - 250,00 gallon Diesel Fuel Storage Tank (<0.02psia)</th> 6 Groups (GR): 7 Emission Units (U): 7 U1 - 8 Simple Cycle Stationary Gas Turbines (used for electric power generation) 14 U2 - 1 MW Emergency Generator 42 U3 - 210 HP Fire Pump 47

Note: See Attachments

BAYONNE ENERGY CTR (12863)

BOP080001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

Subject Item:

FC

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	General Provisions: Defines numerous terms used in N.J.A.C. 7:27. Specifies procedures for making confidentiality claims, certifying applications, reports, and other documents to the Department, and requesting adjudicatory hearings and stays of the effective date of departmental decisions. Also, provides provisions regarding applicability, severability, and liberal construction of N.J.A.C. 7:27. [N.J.A.C. 7:27-1]	None.	None.	None.
2	Control and Prohibition of Open Burning: Prohibits any person from open burning of rubbish, garbage, trade waste, buildings, structures, leaves, other plant life and salvage. Open burning of infested plant life or dangerous material may only be performed with a permit from the Department. [N.J.A.C. 7:27-2]	None.	None.	Obtain an approved permit: Prior to occurrence of event (prior to open burning). [N.J.A.C. 7:27-2]
8	Prohibition of Air Pollution: Notwithstanding compliance with other subchapters of N.J.A.C. 7:27, no person shall suffer, allow, or permit to be emitted into the outdoor atmosphere substances in quantities that result in air pollution as defined at N.J.A.C. 7:27-5.1. Applicable to all facilities located in New Jersey. [N.J.A.C. 7:27-5]	None.	None.	None.
4	Prevention and Control of Air Pollution Control Emergencies: Requires that written Standby Plans, consistent with good industrial practice and safe operating procedures, be prepared for reducing the emission of air contaminants during periods of an air pollution alert, warning, or emergency. Any person responsible for the operation of a source of air contamination not set forth in Table 1 of N.J.A.C. 7:27-12 is not required to prepare such a plan unless requested by the Department in writing.	None.	None.	Comply with the requirement: Upon occurrence of event. Upon proclamation by the Governor of an air pollution alert, warning, or emergency, the permittee shall put the Standby Plan into effect. In addition, the permittee shall ensure that all of the applicable emission reduction objectives of N.J.A.C. 7:27-12.4, Table I, II, and III are complied with whenever there is an air pollution alert, warning, or emergency. [N.J.A.C. 7:27-12]

Date: 9/25/2009

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
Ŋ	Emission Offsets Rules. [N.J.A.C. 7:27-18]	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [N.J.A.C. 7:27-18].	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [N.J.A.C. 7:27-18].	Comply with the requirement: Upon occurrence of event. Submit an administratively complete application when applying for a minor modification pursuant to N.J.A.C. 7:27-22.33 or a significant modification pursuant to N.J.A.C. 7:27-22.24. [N.J.A.C. 7:27-22]
9	Emissions Statements: Submit an annual emission statement (if required) electronically to the NJDEP by May 15 of each year (or by mutually agreed upon date, but no later than June 15 of each year). [N.J.A.C. 7:27-21]	Other: The emission statement will be based on monitoring, recording and recordkeeping of actual emissions, capture and control efficiencies, process rate and operating data for source operations with the potential to emit certain air contaminants. [N.J.A.C. 7:27-21].	Other: The emission statement and all supporting records shall be maintained on the operating premises for a period of five (5) years from the due date of each emission statement. [N.J.A.C. 7:27-21].	Submit an Annual Emission Statement: Annually (if required) electronically by May 15 or by any mutually agreed upon date, but not later than June 15 of each year. [N.J.A.C. 7:27-21]
<u></u>	Compliance Certification: Submit annual compliance certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f), within 60 days after the end of each calendar year during which this permit was in effect. [N.J.A.C. 7:27-22]	None.	None.	Submit an Annual Compliance Certification: Annually to the Department and EPA on forms provided by the Department within 60 days after the end of each calendar year during which this permit was in effect. The annual compliance certification reporting period will cover the calendar year ending December 31. Forms provided by the Department can be found on the Department's web site at the following link: http://www.nj.gov/dep/enforcement/ compliancecertsair.htm [N.J.A.C. 7:27-22]
∞	Prevention of Air Pollution from Architectural Coatings and Consumer Products. [N.J.A.C. 7:27-23]	None.	None.	None.
6	For equipment subject to NOx Budget Program, comply with N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31]	Other: See N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31].	Other: See N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31].	Comply with the requirement: Upon occurrence of event. [N.J.A.C. 7:27-31]
10	Any operation of equipment which causes off-property effects, including odors, or which might reasonably result in citizen's complaints shall be reported to the Department to the extent required by the Air Pollution Control Act, N.J.S.A. 26:2C-19(e). [N.J.S.A. 26:2C-19(e)]	Other: Observation of plant operations. [N.J.S.A. 26:2C-19(e)].	Other: Maintain a copy of all information submitted to the Department. [N.J.S.A. 26:2C-19(e)].	Notify by phone: Upon occurrence of event. A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints shall immediately notify the Department. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26:2C-19(e)]

Date: 9/25/2009

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.# Prever	Applicable Requirement	Monitoring Requirement		
		The state of the s	Recordkeeping Requirement	Submittal/Action Requirement
	Prevention of Significant Deterioration (PSD). [40 CFR 52.21]	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [40 CFR 52.21].	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [40 CFR 52.21].	Comply with the requirement: Upon occurrence of event. If subject to PSD, the permittee shall submit an administratively complete application when applying for a significant modification pursuant to N.J.A.C. 7:27-22.24. [N.J.A.C. 7:27-22]
12 Nation Air Pc [40 C	National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Asbestos. [40 CFR 61]	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61]
Protection of the Signature of the Signa	Protection of Stratospheric Ozone: 1) If the permittee manufactures, transforms, destroys, imports, or exports a Class I or Class II substance, the permittee is subject to all the requirements as specified at 40 CFR 82, Subpart A; 2) If the permittee performs a service on motor "fleet" vehicles when this service involves an ozone depleting substance refrigerant (or regulated substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified at 40 CFR 82, Subpart B. 3) The permittee shall comply with the standards for labeling of products containing or manufactured with ozone depleting substances pursuant to 40 CFR 82, Subpart E. 4). The permittee shall comply with the standards for recycling and emission reductions of Class I and Class II reductions of Class I and Class II reductions of appliances pursuant to 40 CFR 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. 5) The permittee shall be allowed to switch from any ozone depleting substance to any alternative that is listed in the Significant New Alternative Program (SNAP) promulgated pursuant to 40 CFR 82, Subpart G. [40 CFR 82]	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82]

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

<u>_</u>	at at	ν _i
Submittal/Action Requirement	Submit a report: As per the approved schedule. The six-month reports for other specified testing or monitoring required by the operating permit performed from January 1 through June 30 shall be submitted by July 30 of the same calendar year, and from July 1 through December 31, shall be submitted by January 30 of the following calendar year. The report shall be submitted to the Regional Enforcement Office and shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official. Forms provided by the Department can be found on the Department's web site at the following link: http://www.nj.gov/dep/enforcement/compliancecertsair.htm [N.J.A.C. 7:27-22]	Comply with the requirement: Prior to occurrence of event (prior to burning used oil) either register with the Department pursuant to N.J.A.C. 7:27-20.3 or obtain a permit issued by the Department pursuant to N.J.A.C. 7:27-8 or 7:27-22, whichever is applicable. [N.J.A.C. 7:27-20.2(d)]
Recordkeeping Requirement	Other: The permittee shall maintain deviation reports for a period of five years from the date each report is submitted to the Department. [N.J.A.C. 7:27-22.19(a)].	None.
Monitoring Requirement	None.	None.
Applicable Requirement	Deviation Report: In accordance with N.J.A.C. 7:27-22.19(c) and 22.19(d)3, the permittee shall submit to the Department, on forms provided by the Department, a certified six-month deviation report relating to testing and monitoring required by the operating permit, not including information for stack emissions testing or continuous emissions monitoring which have other reporting schedules specified in the permit (normally, stack test report is submitted within 45 days of test completion and continuous monitor reporting is done quarterly). Pursuant to N.J.A.C. 7:27-22.19(e), the six-month report must address other specified monitoring, including continuous and periodic monitoring requirements found in column 2 and 3, entitled "Monitoring Requirement," respectively, of the Facility Specific Requirements section of this permit. These six-month reports shall clearly identify all deviations from operating permit requirements, the probable cause of such deviations, and any corrective actions or preventive measures taken. If no deviations cocurred, the report should say so. Any "None" listed in the Submittal/Action Requirement in the Operating Permit is not intended to override the six-month deviation report. [N.J.A.C. 7.27-22.19(c)]	No person shall combust used oil except as authorized pursuant to N.J.A.C. 7:27-20. [N.J.A.C. 7:27-20.2]
Ref.#		

Date: 9/25/2009

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
16	Prevention of Accidental Releases: Facilities producing, processing, handling or storing a chemical, listed in the tables of 40 CFR Part 68.130, and present in a process in a quantity greater than the listed Threshold Quantity, shall comply with 40 CFR 68. [40 CFR 68]	Other: Comply with 40 CFR 68. [40 CFR 68].	Other: Comply with 40 CFR 68. [40 CFR 68].	Other (provide description): Other. Comply with 40 CFR 68 as described in the Applicable Requirement. [40 CFR 68]
17	For equipment subject to Clean Air Interstate Rule (CAIR) NOx Trading Program, comply with N.J.A.C. 7:27-30. [N.J.A.C. 7:27-30]	Other: See N.J.A.C. 7:27-30. [N.J.A.C. 7:27-30].	Other: See N.J.A.C. 7:27-30. [N.J.A.C. 7:27-30].	Comply with the requirement: Upon occurrence of event. [N.J.A.C. 7:27-30]
18	For equipment subject to CO2 Budget Trading Program, comply with N.J.A.C. 7:27C. [N.J.A.C. 7:27C]	Other: See N.J.A.C. 7:27C. [N.J.A.C. 7:27C].	Other: See N.J.A.C. 7:27C. [N.J.A.C. 7:27C].	Comply with the requirement: Upon occurrence of event. [N.J.A.C. 7:27C]

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

IS1 250,00 galllon Diesel Fuel Storage Tank (<0.02 psia) Subject Item:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeening Requirement	Submittal/Action Requirement
	II	manus umbau Suurannati	recor and pring redunding	Sasting the same and an amount
	VOC (Total) <= 0.11 tons/yr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by calculations annually, based on a 12 calendar month	VOC (Total): Recordkeeping by manual logging of parameter annually. [N.J.A.C.	
		average [N.J.A.C. 7:27-22.16(a)]	7:27-22.16(a)]	
2	Sulfur Content in Fuel <= 0.2 weight %.	Other: Monitored by a current valid	Sulfur Content in Fuel: Recordkeeping by	
	[N.J.A.C. 7:27- 9.2(a)]	purchase contract, tariff sheet or	invoices / bills of lading / certificate of	
		transportation contract for the fuel	analysis per delivery. [N.J.A.C.	
		specifying the sulfur content of the	7:27-22.16(o)]	
		fuel.[N.J.A.C. 7:27-22.16(o)].		

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New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

Subject Item: GR1 Facility Annual emissions

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	NOx (Total) <= 109.51 tons/yr based on a consecutive 12 month period, rolling one month basis. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis).	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
		Total annual emissions of NOx from the facility shall include NOx emitted by the eight turbines, one emergency diesel generator, and one fire water pump. The total annual emissions shall be calculated as follows:		
		NOx (total) tons/month = Cumulative monthly NOx emissions (tpy) derived from each combustion turbine CEMS system + (13.9 lbs/hr x monthly operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (2.3 lbs/hr x monthly operating hours for diesel Fire Water Pump / 2000 lbs/ton).		
		The permittee shall calculate the total monthly emissions of the eight turbines, the emergency generator and the fire pump for each calendar month, and sum those emissions with the emissions of the eight		
		turbines, the emergency generator and the fire pump in the previous eleven (11) calendar months to determine the total annual emissions in the 12 month period. [N.J.A.C. 7:27-22.16(o)]		

Date: 9/25/2009

New Jersey Department of Environmental Protection

Facility Specific Requirements

Ref.#	;# Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	CO <= 130.36 tons/yr based on a consecutive 12 month period, rolling one month basis. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis).	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation.	None.
		Total annual emissions of CO from the facility shall include CO emitted by the eight turbines, one emergency diesel generator, and one fire water pump. The total annual emissions shall be calculated as follows:	[(0)01.77-77(1)]	
		CO (total) tons/month= Cumulative monthly CO emissions (tpy) derived from each combustion turbine CEMS system + (7.69 lbs/hr x monthly operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (0.19 lbs/hr x monthly operating hours for diesel Fire Water Pump / 2000 lbs/ton).		
		The permittee shall calculate the total monthly emissions of the eight turbines, the emergency generator and the fire pump for each calendar month, and sum those emissions with the emissions of the eight		
		turbines, the emergency generator and the fire pump in the previous eleven (11) calendar months to determine the total annual emissions in the 12 month period. N 1 A C 7-72-7 16(0)		

Date: 9/25/2009

New Jersey Department of Environmental Protection Facility Specific Requirements

Submittal/Action Requirement	None.				
Recordkeeping Requirement	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]				
Monitoring Requirement	VOC (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis).	Total annual emissions of VOC from the facility shall include VOC emitted by the eight turbines, one emergency diesel generator, and one fire water pump. The total annual emissions shall be calculated as follows:	VOC (Total) tons/month= (1.93 lbs/hr x sum of monthly operating hours for eight combustion turbines firing natural gas / 2000 lbs/ton) + (3.27 lbs/hr x sum of monthly operating hours for eight combustion turbines firing oil / 2000 lbs/ton) + (0.03 lbs/hr x monthly operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (0.08 lbs/hr x monthly operating hours for diesel Fire Water Pump / 2000 lbs/ton).	The permittee shall calculate the total monthly emissions of the eight turbines, the emergency generator and the fire pump for each calendar month, and sum those emissions with the emissions of the eight turbines, the emergency generator and the	fire pump in the previous eleven (11) calendar months to determine the total
Applicable Requirement	VOC (Total) <= 36.82 tons/yr based on a consecutive 12 month period, rolling one month basis. [N.J.A.C. 7:27-22.16(a)]				
Ref.#	8				

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	SO2 <= 23.23 tons/yr based on a consecutive 12 month period, rolling one month basis. [N.J.A.C. 7:27-22.16(o)]	SO2: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis).	SO2: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation.	None.
		Total annual emissions of SO2 from the facility shall include SO2 emitted by the eight turbines. The total annual emissions shall be calculated as follows:	[N.J.A.C. 7.27-727.10(0)]	
		SO2 (Total) tons/month= [(1.2 lb/hr)*(hours per month operating on natural gas)]/[(2000) lb/ton + [(0.8 (lb/hr)*(hours per month operating on ULSD)]/[(2000) lb/ton.		
		The permittee shall calculate the total monthly emissions of the eight turbines, the emergency generator and the fire pump for each calendar month, and sum those		
		emissions with the emissions of the eight turbines, the emergency generator and the fire pump in the previous eleven (11) calendar months to determine the total annual emissions in the 12 month period. [N.J.A.C. 7:27-22.16(a)]		

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
ν.	TSP <= 94.99 tons/yr based on a consecutive 12 month period, rolling one month basis. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis).	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(0)]	None.
		Total annual emissions of TSP from the facility shall include TSP emitted by the eight turbines, one emergency diesel generator, and one fire water pump. The total annual emissions shall be calculated as follows:		
		TSP (Total) tons/month = (5.0 lbs/hr x sum of monthly operating hours for eight combustion turbines firing natural gas/ 2000 lbs/ton) + (15 lbs/hr x sum of monthly		
		operating hours for eight combustion turbines firing oil / 2000 lbs/ton) + (0.06 lbs/hr x monthly operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (0.07 lbs/hr x monthly operating hours for diesel Fire Water Pump / 2000 lbs/ton)		
		The permittee shall calculate the total monthly emissions of the eight turbines, the emergency generator and the fire pump for each calendar month, and sum those		
		emissions with the emissions of the eight turbines, the emergency generator and the fire pump in the previous eleven (11)		
		annual emissions in the 12 month period. [N.J.A.C. 7:27-22.16(o)]		

Date: 9/25/2009

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	PM-2.5 (Total) <= 94.99 tons/yr based on a consecutive 12 month period, rolling one month basis. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by calculations each month during operation, based on a consecutive 12 month period (rolling 1 month basis).	PM-2.5 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
		Total annual emissions of PM2.5 from the facility shall include PM2.5 emitted by the eight turbines and one emergency diesel generator, and one fire water pump. The total annual emissions shall be calculated as follows:		
		PM2.5 (Total) tons/year = (5.0 lbs/hr x sum of monthly operating hours for eight combustion turbines firing natural gas/ 2000 lbs/ton) + (15 lbs/hr x sum of monthly operating hours for eight combustion turbines firing oil / 2000 lbs/ton) + (0.06 lbs/hr x monthly operating hours for Emergency Diesel Generator, 2000 lbs/ton) + (0.07 lbs/hr x monthly operating hours for the formal to the properties of the pr		
		diesel Fire Water Pump / 2000 lbs/ton) The permittee shall calculate the total monthly emissions of the eight turbines, the emergency generator and the fire number for		
		each calendar month, and sure the pump roce each calendar month, and sum those emissions with the emissions of the eight turbines, the emergency generator and the fire pump in the previous eleven (11) calendar months to determine the total annual emissions in the 12 month period.		

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
	PM-10 (Total) <= 94.99 tons/yr based on a consecutive 12 month period, rolling one month basis. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by calculations each month during operation, based on a rolling 30 day average (rolling 1 day basis). Total annual emissions of PM10 from the facility shall include PM10 emitted by the eight turbines and one emergency diesel generator, and one fire water pump. The total annual emissions shall be calculated as follows:	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. [N.J.A.C. 7:27-22.16(o)]	None.
		PM10 (Total) tons/year = (5.0 lbs/hr x sum of monthly operating hours for eight combustion turbines firing natural gas/2000 lbs/ton) + (15 lbs/hr x sum of monthly operating hours for eight combustion turbines firing oil / 2000 lbs/ton) + (0.06 lbs/hr x monthly operating hours for Emergency Diesel Generator / 2000 lbs/ton) + (0.07 lbs/hr x monthly operating hours for diesel Fire Water Pump / 2000 lbs/ton)		
		The permittee shall calculate the total monthly emissions of the eight turbines, the emergency generator and the fire pump for each calendar month, and sum those emissions with the emissions of the eight turbines, the emergency generator and the fire pump in the previous eleven (11) calendar months to determine the total annual emissions in the 12 month period. [N.J.A.C. 7:27-22.16(0)]		

New Jersey Department of Environmental Protection Facility Specific Requirements

U1 8 Simple Cycle Stationary Gas Turbines (used for electric power generation) Emission Unit:

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Conduct a comprehensive stack test at emission point PT1 through PT8 within 180 days from the date of initial operation of the	Monitored by stack emission testing once initially.	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously and stack fest results once initially	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the
	turbines to demonstrate compliance with the NOx. CO. VOC. SO2, TSP. PM2.5. PM10.	Compliance shall also be determined by continuous emission monitoring for NOx.	[N.J.A.C. 7:27-22.16(o)]	Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 within 60 days
	Ammonia and opacity emission limits while burning natural gas and ultra low sulfur	CO and O2.		from the date of the initial operation of the turbines. Within 30 days of protocol
	distillate oil. Compliance shall also be	Unless otherwise approved in the stack test		approval, the permittee must contact BTS at
	monitoring for NOx, CO and O2.	shall be 60 minutes in sampling duration.		acceptable test date. The stack test must be
	The stack emission testing shall be	Computance period shall be as specified in the monitoring requirement for each		conducted within 180 days from the date of the initial operation of each turbine.
	conducted at worst-case operating conditions with regard to meeting the	applicable emission limit. Stack tests shall be conducted for NOx. CO. VOC. SO2.		N.J.A.C.7:27-22.19(d).
	applicable emission standards, but without	TSP, PM2.5, PM10, ammonia and opacity		The stack test report must be submitted to
	creating an unsafe condition.	emissions, while combusting natural gas and ultra low sulfur distillate oil.		BTS within 45 days after performing the stack test pursuant to N.J.A.C.
	The permittee shall provide BTS with the	. [N.J.A.C. 7:27-22.16(o)]		7:27-22.19(d). The test results must be
	urbine load periornance curve with the protocol.			certified by a licensed professional engineer or certified industrial hygienist.
	The initial performance test for compliance			A copy of the test results must be submitted
	with NOx emission limits, as per NSPS			with the operating permit renewal
	KKKK, must be done at any load condition			application due at least 12 months prior to
	within plus or minus 25 percent of 100 percent of peak load. Alternatively, the			expiration of the Operating Permit.
	testing might be performed at the highest			The test results shall be reported in lb/hr,
	achievable load point, if at least 75 percent of peak load cannot be achieved.			Ib/MMBTU (HHV) and ppmvd @ 15% O2.
	[40CFR60.4400] [N.J.A.C. 7:27-22.16(a)]			For CEMS: Submit equipment protocol.
				submit a Performance Specification Tests
				(PST) protocol, conduct PST and submit results as per the approved schedule.
				[N.J.A.C. 7:27-22.18(e)]. [N.J.A.C.
				7.27-22.18(h)] and. [N.J.A.C.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	Conduct a comprehensive stack test at emission points PT1 through PT8 at least 18 months prior to the expiration of the approved operating permit to demonstrate compliance with the NOx, CO, VOC, PM2.5, PM10 and Ammonia emission limits while combusting natural gas and with the NOx, CO, VOC, TSP, PM2.5, PM10 and Ammonia emission limits while combusting ultra low sulfur distillate oil. Compliance shall also be determined by continuous emission monitoring for NOx, CO and O2. The stack emission testing shall be conducted at worst-case operating conditions with regard to meeting the applicable emission standards, but without creating an unsafe condition. [N.J.A.C. 7:27-22.16(a)]	Monitored by stack emission testing prior to permit renewal. Compliance shall also be determined by continuous emission monitoring for NOx, CO and O2. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for NOx, CO, VOC, PM2.5, PM10 and Ammonia emission limits while combusting natural gas and for NOx, CO, VOC, TSP, PM2.5, PM10 and Ammonia emission limits while combusting ultra low sulfur distillate oil. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously and by stack emission test results prior to permit renewal. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit. Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. A full stack test report must be submitted to BTS and a certified summary test report, as described in the protocol, must be submitted to the Regional Enforcement Office within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a licensed professional engineer or certified industrial hygienist. A copy of the certified summary test results must be submitted with the operating permit renewal application of the Operating Permit. The test results shall be reported in lb/hr, lb/MMBTU (HHV) and ppmvd @ 15% 02. For CEMS: Submit equipment protocol, submit a Performance Specification Tests (PST) protocol, conduct PST and submit results as per the approved schedule. [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.18(h)] and. [N.J.A.C. 7:27-22.18(h)]
8	CO <= 250 ppmvd @ 15% O2. VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see UI/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(0)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see UI/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(0)]

Date: 9/25/2009

Ref.# Applicable Requirement 4 VOC (Total) <= 50 ppmvd @ 15% 02. VOC RACT emission limit applies during all operation. [N.J.A.C. 7:27-16.9(b)] 5 The Permittee shall adjust the combustion process in accordance with the procedure set forth at N.J.A.C. 7:27-19.16, in order to optimize the emission of NOx, CO and	romont	Monitoring Requirement	;	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Munum my my money	Recordkeeping Requirement	Submittal/Action Requirement
	@ 15% O2. applies during 7-16.9(b)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs (Please see U1/OS Summary REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Sumnary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(0)]
VOC. Adjustment of the combustion process shall be carried out according to manufacturer's recommended procedures and maintenance schedules for each turbine. [N.J.A.C. 7:27-16.9(f)2, N.J.A.C. 7:27-19.5(e)2] & [N.J.A.C. 7:27-19.16(g)]	he combustion the procedure set 6, in order to 0x, CO and ombustion according to ed procedures for each turbine. J.A.C. 7:27-19.16(g)]	Monitored by continuous emission monitoring system upon performing combustion adjustment Or Periodic Emission Monitoring. [N.J.A.C. 7:27-19.16(h)]	Recordkeeping by data acquisition system (DAS) / electronic data storage upon performing combustion adjustment or manual logging of parameter upon performing combustion adjustment. The records should be kept in a permanent form suitable for inspections. The owner or operator shall record the following information for each adjustment: 1. The date of the adjustment and the times at which it began and ended; 2. The name, title and affiliation of the person who performed the procedure and adjustment; 3. The type of procedure and maintenance performed; 4. The concentration of NOx, CO and O2 measured before and after the adjustment was made; and 5. The type and amount of fuel used since the last combustion adjustment was	Nome.

Ref.#	# Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
9	An exceedance of an emission limit that occurs during an adjustment of the combustion process under N.J.A.C. 7:27-19.16(g) is not a violation of this subchapter if it occurs as a result of the adjustment. After the combustion adjustment has been completed, the maximum emission rate of any contaminant shall not exceed the maximum allowable emission rate applicable under this subchapter or under an operating permit issued pursuant to N.J.A.C. 7:27-22 or an applicable certificate issued pursuant to N.J.A.C. 7:27-19.16(f)]	None.	None.	None.
7	TSP <= 94.96 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
8	PM-10 (Total) <= 94.96 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	PM-2.5 (Total) <= 94.96 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	VOC (Total) <= 36.68 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	NOx (Total) <= 105.47 tons/yr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(a)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
12	CO <= 128.39 tons/yr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a consecutive 12 month period (rolling 1 month basis). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
13	SO2 <= 23.22 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
41	Ammonia <= 77.95 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

App	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
Acrolein \leq 0. 7:27-22.16(a)]	Acrolein <= 0.07 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
Formaldehyde 7:27-22.16(a)]	Formaldehyde \leq 8.14 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
Lead comp [N.J.A.C. 7	Lead compounds ≤ 0.022 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
Manganes [N.J.A.C.	Manganese compounds ≤ 1.22 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
Sulfuric A tons/yr. []	Sulfuric Acid Mist Emissions <= 6.97 tonsyr. [N.J.A.C. 7.27-22.16(a)]	None.	None.	None.
The Selective (shall be used to (NOx) resultin turbine, at the operating flue NOx (Total) er turbines in this 7:27-22.16(a)]	The Selective Catalytic Reduction system shall be used to destroy Nitrogen Oxides (NOx) resulting from combustion in the turbine, at the recommended manufacturer's operating flue gas flowrate range, such that NOx (Total) emissions as established for the turbines in this permit are met. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The permittee shall maintain SCR system manufacturer's documentation, specifications, operation and maintenance manual on-site.[N.J.A.C. 7:27-22.16(o)].	None.
The SCRs CD402, C shall be o is operatii shutdown	The SCRs (CD102, CD202, CD302, CD402, CD502, CD602, CD702, CD802) shall be operated at all times that the turbine is operating, except during start-up and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously. The permittee shall record the time and duration of the operation of both the SCR and the gas turbine. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the stationary combustion engine and the selective catalytic reduction unit (SCR). [N.J.A.C. 7:27-22.16(o)]	None.
The SCR CD402, (array(s) s accordan schedules NOx emi	The SCR catalyst, CD102, CD202, CD302, CD402, CD502, CD602, CD702, CD802, array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer and based on NOx emission levels indicated through CEM/stack testing. [N.J.A.C. 7:27-22.16(a)]	Monitored by temperature instrument continuously, based on a 1 hour block average. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C.	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
	Temperature at Exit of Catalyst >= 550 and Temperature at Exit of Catalyst <= 860 degrees F Except during startup/shutdown periods. Applicable to SCRst CD102, CD202, CD302, CD402, CD502, CD602, CD702, CD802). The permittee shall not be considered in violation for any deviation of this requirement if the corresponding NOx emissions from the turbine are in compliance with the applicable emission limits established in this permit. [N.J.A.C. 7:27-22.16(a)]	Temperature at Exit of Catalyst: Monitored by temperature instrument continuously, based on a 1 hour block average. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Temperature at Exit of Catalyst: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.
	Selective Catalytic Reduction (CD102, CD202, CD302, CD402, CD502, CD602, CD602, CD602, CD602): NOx Percentage Removal >= 90 % (design value) for natural gas firing, and, NOx Percentage Removal >= 88% for ULSD oil firing. [N.J.A.C. 7:27-22.16(a)]	None.	Other: The permittee shall keep SCR manufacturer's documentation, as-built performance guarantee and operation and maintenance manual on-site.[N.J.A.C. 7:27-22.16(o)].	None.
	The permittee shall operate the Water Injection System (CD101, CD201, CD301, CD401, CD501, CD601, CD701, CD801) during all periods that the gas turbine is operating, except during start-up, or shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously, based on an instantaneous determination. The permittee shall record the time and duration of the operation of both the water injection system and the gas turbine. [N.J.A.C. 7:27-22.16(a)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the gas turbine and the water injection system. [N.J.A.C. 7:27-22.16(o)]	None.
	Water-to-Fuel Ratio: The water-to-fuel ratio shall be within the manufacturer's recommended limits. [N.J.A.C. 7:27-22.16(a)]	Water-to-Fuel Ratio: Monitored by water-to-fuel monitoring device continuously. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C.	Water-to-Fuel Ratio: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	None.

Date: 9/25/2009

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
27	The Oxidation Catalysts (CD103, CD203, CD303, CD403, CD503, CD603, CD703, CD803), shall be used to destroy carbon monoxide (CO) and volatile organic compounds (VOC) resulting from the combustion of fuel in the turbine at the recommended manufacturer's operating flue gas flowrate range. The minimum CO destruction efficiency shall be >= 90% (design value) for gas firing and >= 85% (design value) for oil firing, such that CO and VOC (Total) emission limits, as established in this permit, are met. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by document of construction[N.J.A.C. 7:27-22.16(o)].	Other: The permittee shall maintain Catalytic Oxidizer system manufacturer's documentation, specifications, and operation & maintenance manual (O&M) on-site.[N.J.A.C. 7:27-22.16(o)].	None.
28	The oxidation catalysts, referred by CD103, CD203, CD303, CD403, CD503, CD603, CD703, CD803, shall be operated at all times that the turbine is operating except during start-up and shutdown. [N.J.A.C. 7:27-22.16(a)]	Monitored by hour/time monitor continuously, based on an instantaneous determination. The permittee shall record the time and duration of the operation of both the oxidation catalyst and the gas turbine. [N.J.A.C. 7:27-22.16(0)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. The permittee shall continuously record the time and duration of the operation of the gas turbine and the oxidation catalyst unit. [N.J.A.C. 7:27-22.16(o)]	None.
29	The Oxidation Catalysts CD103, CD203, CD303, CD403, CD503, CD603, CD703, CD803, array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer, based on usage rate. The SCR catalyst, CD102, CD202, CD302, CD402, CD502, CD602, CD702, CD802, array(s) shall be maintained and replaced in accordance with the recommendations and schedules of the manufacturer and based on NOx emission levels indicated through CEM/stack testing. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by documentation of construction.[N.J.A.C. 7:27-22.16(o)].	Other: Record keeping by mannual logging of parameter or storing data in computer system. The permittee shall maintain the catalyst maintenance and replacement records on-site.[N.J.A.C. 7:27-22.16(o)].	None.
30	Comply with 40 CFR 60 Subpart A and Subpart KKKK. [40 CFR 60]	Other: Comply with 40 CFR 60 Subpart A & KKKK.[40 CFR 60].	Other: Comply with 40 CFR 60 Subpart A & KKKK.[40 CFR 60].	Other (provide description): As per the approved schedule Comply with 40 CFR 60 Subpart A & KKKK. [40 CFR 60]

BAYONNE ENERGY CTR (12863)

BAYONNE ENERGY C BOP080001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
31	All requests, reports, applications, submittals, and other communication required by 40 CFR 60 shall be submitted in duplicate to the EPA Region II Administrator. [40 CFR 60.4(a)]	None.	None.	Submit a report: As per the approved schedule, submit reports to EPA Region II as required by 40 CFR 60. Send information to: Director, Air and Waste Management Division, US Environmental Protection Agency, Region II, 290 Broadway, New York, NY 10007-1866. [40 CFR 60.4(a)]
32	Submit copy of all requests, reports, applications, submittals, and other communication required by 40 CFR 60 to the Southern Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Submit a report: Other: Submit reports to the Southern Regional Office as required by 40 CFR 60. Submit to: Southern Regional Office New Jersey Department of Environmental Protection One Port Center 2 Riverside Drive, Suite 201 Camden, NJ 08102. [40 CFR 60.4(b)]
33	The owner or operator subject to the provisions of 40 CFR Part 60, shall notify the Department in writing, of the date of construction or reconstruction of the facility as defined under 40 CFR Part 60 Subpart A. Notification shall be postmarked no later than 30 days after such date. [40 CFR 60.7(a)(1)]	None.	None.	Submit a report: As per the approved schedule. The permittee shall notify the Department within thirty (30) days from the date of construction. [40 CFR 60.7(a)(1)]
4.6	A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in Section 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this	None.	None.	Comply with the requirement: Upon occurrence of event submit notification to EPA Region II and the Southern Regional Office per 40 CFR 60.7. [40 CFR 60.7(a)(4)]

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Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
35	Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]	None.	Other: Manual logging of the parameters specified in 40 CFR 60.7(b) in a permanently bound log book. Upon occurrence of event. (See Applicable Requirement).[40 CFR 60.7(b)].	None.
36	The owner or operator shall submit to the Administrator, for each pollutant monitored, an excess emissions and monitoring systems performance report and a summary report form. [40 CFR 60.7(c)]	None.	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests electronically through the NJDEP online EEMPR web portal. The report shall be postmarked by the 30th day following the end of each calendar half. The report shall be submitted and be in a format as specified at 40 CFR 60.7(c) and 40 CFR 60.7(d). [40 CFR 60.7(c)]
37	Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. [40 CFR 60.7(f)]	None.	Recordkeeping by manual logging of parameter continuously. The parameters shall include continuous monitoring system, monitoring device, and performance testing measurements), all continuous monitoring system performance evaluations, all continuous monitoring system or monitoring device calibration checks, all adjustments-maintenance performed on these systems or devices, and all other information required by 40 CFR Part 60. All records shall be kept on-site for at least five (5) years, and readily made available to the Department upon request. [40 CFR 60.7(f)]	None.
38	Within 60 days after achieving the maximum production rate at which the affected facility will operate, but not later than 180 days after initial startup of the facility, the owner or operator shall conduct performance test(s) and shall furnish the Administrator a written report of the results. [40 CFR 60.8(a)]	None.	None.	Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit results of the performance test(s) to the Administrator. [40 CFR 60.8(a)]

BAYONNE ENERGY CTR (12863)

BOP080001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
39	Performance tests shall be conducted under conditions the Administrator specifies to the plant operator based on representative performance of the facility. Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of the performance test nor shall emissions in excess of the level of the applicable emission limit be considered a violation of the applicable emission limit the applicable standard. [40 CFR 60.8(c)]	None.	None.	None.
40	The owner or operator shall provide the Administrator at least 30 days prior notice of any performance test and shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e).[40 CFR 60.8(d)].	None.	None.	Submit a report: As per the approved schedule. Written notification shall be submitted to the NJDEP Southern Regional Office at least 30-days prior to any performance test. The permittee shall provide adequate performance testing facilities as specified in 40 CFR Part 60.8(e). [40 CFR 60.8(d)]
41	Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. [40 CFR 60.8(f)]	None.	None.	None.
42	Compliance with NSPS standards specified in this permit, other than opacity, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in NSPS. [40 CFR 60.11(a)]	None.	None.	None.
43	At all times, including periods of startup, shutdown, and malfunctions, owners and operators shall, to the extent practible, maintain and operate the facility, including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing air emissions. [40 CFR 60.11(d)]	None.	None.	None.

Date: 9/25/2009

New Jersey Department of Environmental Protection

Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
44	No owner or operator subject to the provisions of this part shall build, errect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.	None.	None.	None.
45	All continuous emission monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests specified under 40 CFR Part 60.8. The owner or operator shall follow manufacturer's written recommendations for installation, operation and calibration of the device [40 CFR 60.13(b)]	Other: During any performance test required under 40 CFR Part 60.8 or within 30 days thereafter, the owner or operator shall conduct a performance evaluation of the continuous emission monitoring system in accordance with applicable performance specification in Appendix B of 40 CFR Part 60[40 CFR 60.13(c)].	None.	Submit a report: As per the approved schedule, within 60 days of completion of the performance test, furnish the Administrator two or, upon request, more copies of the results of the performance evaluation. [40 CFR 60.13(c)(2)]
46	The owner or operator shall perform calibrations and span adjustments for continuous emission monitors and continuous opacity monitors following procedures outlined in 40 CFR 60.13 (d) 1 & 2. [40 CFR 60.13(d)]	None.	Other: Maintain records in accordance with 40 CFR 60.7(f).[40 CFR 60.13(d)].	None.

-	Submittal/Action Requirement	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
4 -	Recordkeeping Requirement	NOx (Total): Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4460]	NOx (Total): Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4460]
•	Monitoring Requirement	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three tests. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The owner or operator shall conduct an initial performance test and an annual test thereafter. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three tests. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The owner or operator shall conduct an initial performance test and an annual test thereafter. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]
- - -	Applicable Requirement	NOx (Total) <= 25 ppmvd @ 15% O2. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) but less or equal to 850 MMBtu/hr (HHV) firing natural gas and which commenced construction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total) <= 1.2 lb/MW-hr of useful output. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) but less or equal to 850 MMBtu/hr (HHV) firing natural gas and commenced construction after February 18, 2005. [40 CFR 60.4320(a)]
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$oxed{A}$	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
NOx (Total output. This has heat ing MMBtu/hr MMBtu/hr natural gas after Februs 60.4320(a)]	NOx (Total) <= 3.6 lb/MW-hr of useful output. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) firing fuels other than natural gas and commenced construction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three tests. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The owner or operator shall conduct an initial performance test and an annual test thereafter. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. For turbines with supplemental duct burner NOx measurements shall be taken after the duct burner, which has to be in operation during the performance test. [40 CFR 60.4400]	NOx (Total): Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4460]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
NOx (To limit app at peak lo at peak lo (HHV) b (HHV) the and whice February	NOx (Total) <= 74 ppmvd @ 15% O2. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) but less or equal to 850 MMBtu/hr (HHV) firing fuels other than natural gas and which commenced construction after February 18, 2005. [40 CFR 60.4320(a)]	NOx (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. Test methods and procedures shall be consistent with the requirements of 40 CFR 60.4400 or, if a NOx diluent CEMS is installed, consistent with 40 CFR 60.4405. The owner or operator shall conduct an initial performance test and an annual test thereafter. The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Alternatively, the testing might be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. [40 CFR 60.4400]	NOx (Total): Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4460]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]

Date: 9/25/2009

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
51	SO2: If a turbine burns both natural gas and distillate oil (or some other combination of fuels) and total heat input is greater than or equal to 50 percent natural gas this turbine is subject to the corresponding limit for a natural gas-fired turbine for the duration of the time the turbine burns that particular fuel. [40 CFR 60.4325]	SO2: Monitored by stack emission testing at the approved frequency, based on the average of three tests. Test methods and procedures shall be consistent with 40 CFR 60.4415(a)(2) or 60.4415(a)(3). [40 CFR 60.4360]	SO2: Recordkeeping by stack test results at the approved frequency. [40 CFR 60.4415]	Submit a report: As per the approved schedule. The owner or operator shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test. [40 CFR 60.4375(b)]
52	If a turbine burns both natural gas and distillate oil (or some other combination of fuels) and total heat input is greater than or equal to 50 percent distillate oil and fuels other than natural gas this turbine is subject to the corresponding limit for a distillate oil and fuels other than natural gas for the duration of the time the turbine burns that particular fuel. [40 CFR 60.4325]	None.	None.	None.
53	SO2 <= 0.06 lb/MMBTU. No owner or operator shall burn any fuel which contains total potential sulfur emissions in excess of specified limit. If the turbine simultaneously fires multiple fuels, each fuel must meet this requirement. [40 CFR 60.4330(a)(2)]	Other: The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO2 per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.4365].	None.	Submit documentation of compliance: Once initially. The permittee shall furnish the Administrator and NIDEP a written report of the results. The permittee shall demonstrate that the potential sulfur emissions from each type of fuel do not exceed potential sulfur emissions of 0.060 lb SO2 per MMBtu heat input using sources of information listed in 40 CFR 60.4365(a) or perform representative fuel sampling as described in 60.4365(b). [40 CFR 60.8(a)]
54	The owner or operator shall operate and maintain the subject stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and malfunction. [40 CFR 60.4333(a)]	None.	None.	None.

Date: 9/25/2009

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
55	The permittee shall install and certify a NOx diluent CEMS in accordance with to appendix A to 40 CFR 75. The relative accuracy test audit (RATA) shall be performed on a lb/MMBtu basis. [40 CFR 60.4345(a)]	Monitored by continuous emission monitoring system continuously. During each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (Sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour, as specified in 40 CFR 60.13(e)(2). The permittee shall follow procedure described in 40 CFR 60.4345(b) for partial unit operating hours. [40 CFR 60.4345(b)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. For NOx CEMS and fuel flow meters, the QA program and plan described in section 1 of appendix B to 40 CFR 75 may, with state approval, satisfy this requirement. [40 CFR 60.4345(e)]	None.
56	The permittee shall install and certify each NOx diluent CEMS in accordance with Performance Specifications 2 (PS2) as described in appendix B to 40 CFR 60. The 7 day calibration drift should be based on unit operating days, not calendar days. Upon the Bureau of Technical Services of NJDEP approval, Procedure 1 in appendix F to 40 CFR 60 is not required. The relative accuracy test audit (RATA) shall be performed on a lb/MMBtu basis. [40 CFR 60.4345(a)]	Monitored by continuous emission monitoring system continuously. During each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (Sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour, as specified in 40 CFR 60.13(e)(2). The permittee shall follow procedure described in 40 CFR 60.4345(b) for partial unit operating hours. [40 CFR 60.4345(b)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. For NOx CEMS and fuel flow meters, the QA program and plan described in section 1 of appendix B to 40 CFR 75 may, with state approval, satisfy this requirement. [40 CFR 60.4345(e)]	None.
57	The permittee shall install, calibrate, maintain, and operate each watt meter, steam flow meter, and each pressure or temperature measurement device in accordance with the manufacturer's instructions. [40 CFR 60.4345(d)]	Monitored by other method (provide description) continuously. The gross electrical output of the unit in megawatt-hours shall be monitored by watt meter (or (meters) and shall be installed, calibrated, maintained and operated according to the manufacturer's instructions. [40 CFR 60.4345(d)]	Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment. [40 CFR 60.4345(e)]	None.
88	The owner or operator shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in 40 CFR 60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.4415 or, alternatively, as allowed in 40 CFR 60.4360. The analyses may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency. [40 CFR 60.4360]	Other: The owner or operator may develop custom schedule for determination of the total sulfur content of gaseous fuels. The custom schedule shall be substantiate with data and shall be approved by the Administrator before they can be used to comply with the Sulfur standard in fuel except for the two custom schedules set forth in 40 CFR 60.4370(c)(1)(i) through (iv) and in 40 CFR 60.4370(c)(2) which are acceptable without prior Administrator approval. [40 CFR 60.4370(c)].	Recordkeeping by certified lab analysis results at the approved frequency. The owner or operator shall record the results of each analysis for fuel sulfur content. [40 CFR 60.4415]	Submit a report: As per the approved schedule. The permittee shall determine excess emissions and monitoring downtime as described in 40 CFR 60.4385(a) through (c) and submit an excess emissions report by the 30th day following the end of each 6-month period as prescribed in 40 CFR 60.4395. [40 CFR 60.4385]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
29	The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine if the fuel is demonstrated not to exceed potential sulfur emissions of 0.060 lb SO2/MMBtu heat input for units located in continental areas. [40 CFR 60.4365]	Other: The required demonstration that the total sulfur content of the fuel does not exceed potential sulfur emissions of 0.060 lb SO2/MMBtu shall be made using a current valid purchase contract, tariff sheet or transportation contract specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365(a)].	Recordkeeping by fuel certification receipts at the approved frequency The owner or operator shall keep copies of valid purchase contracts, tariff sheets or transportation contracts specifying that in continental areas the maximum total sulfur content for oil use is 0.05 weight percent (500 ppmw) and for natural gas use is 20 grains of sulfur or less per 100 standard cubic feet. [40 CFR 60.4365]	Demonstrate compliance: Once initially. The owner or operator shall submit the required determination to the Administrator using the sources of information described in 40 CFR 60.4365(a) showing the maximum total sulfur content for continental areas for oil use at 0.05 weight percent or less and for natural gas at 20 grains of sulfur or less per 100 standard cubic feet or to demonstrate that fuel has potential sulfur emissions of less than 0.060 lb SO2 ///////////////////////////////////
09	The owner or operator shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c) for Nitrogen oxides. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. An excess emissions as defined in 40 CFR 60.4380(b)1 is any unit operating period in which the 4-hour (for simple cycle turbines) or 30-day rolling average NOx emission rate exceeds the applicable emission limit in 40 CFR 60.4320. A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NOx concentration, CO2 or O2 concentration, fuel flow rate, steam flow rate, steam temperature, steam flow rate, steam temperature, and steam pressure are only required if used for compliance demonstration. [40 CFR 60.4380(b)]	Other: For the purposes of identifying excess emissions based on data from the continuous emission monitoring equipment the permittee shall follow procedures described in 40 CFR 60.4350(a), (b), (c), (e), (f), (g), and (h). If a NOx diluent CEMS meets the requirements of 40 CFR 75, the only quality assured data from the CEMS shall be used to identify excess emissions. Periods where the missing data substitution procedures in subpart D of 40 CFR 75 are applied are to be reported as monitor downtime. [40 CFR 60.4350].	None.	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Semi-annually beginning on the 30th day of the 6th month following initial performance tests. All reports required under 40 CFR 60.7(c) must be postmarked by the 30th day following the end of each 6-moth period. [40 CFR 60.4395]
61	Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]	Other: Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit.[40 CFR 72].	Other: Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72].	Other (provide description): As per the approved schedule Acid Rain:Comply with the requirements contained in the attached Acid Rain Permit. [40 CFR 72]
62	NOx and VOC Emission Offsets: 142.36 tons of NOx offsets, and 47.87 tons of VOC (total) offsets that meet the criteria established in N.J.A.C. 7:27-18.1 et. seq. for NOx and VOC (total) emissions, must be acquired prior to the initial startup of the facility. [N.J.A.C. 7:27-18.3(c)]	None.	None.	Submit documentation of compliance: Once initially. Obtain emission offsets and submit Purchase Agreement to the Chief, Bureau of Air Quality Permitting, and REO, prior to initial startup of the facility. [N.J.A.C. 7:27-18.18(c)1]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
63	The permittee shall submit an Excess Emission Monitoring Performance Report to the appropriate Regional Enforcement Office (REO) for review and approval. This report shall be submitted to the REO whether or not an emission exceedance has occurred. [N.J.A.C. 7:27-22.16(a)]	None.	Recordkeeping by manual logging of parameter or storing data in a computer data system at no required frequency. [N.J.A.C. 7:27-22.16(0)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
49	The owner or operator shall develop a QAQC plan for all CEMS/COMS required by this permit. This QAQC plan shall incorporate at a minimum those procedures outlined in 40 CFR, Part 75, Appendix B for CEMS and those procedures outlined in 40 CFR, Part 57, Appendix B for CEMS and those procedures outlined in 40 CFR, Part 60, Appendix B, Specification One and 40 CFR, Part 51, Proposed RM 203 for COMS, published Department Technical Manuals or other procedures approved in writing by the Department. The QA/QC plan shall designate a coordinator for the facility who is responsible to ensure that the QA/QC plan is implemented. The Department reserves the right to require the QA/QC plan to be revised at any time based on the results of quarterly EEMPR reviews, inspections, audits or any other information available to the Department. All procedures outlined in the QA/QC plan shall commence upon the completion date of the PST. All redundant CEMS/COMS must undergo the QA/QC procedure. [N.J.A.C. 7:27-22.16(a)] [N.J.A.C. 7:27-22.16(a)]	Other: The QA/QC coordinator shall be responsible for reviewing the QA/QC plan on an annual basis.[N.J.A.C. 7:27-22.16(o)].	Other: Maintain readily accessible records of the QA/QC plan including QA date and quarterly reports.[N.J.A.C. 7:27-22.16(o)].	Submit a report: Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1). All quarterly and annual QA data shall be included in quarterly EEMPR reports and kept on file at the facility. The QA data must be made available to the Department upon request. [N.J.A.C. 7:27-22.16(o)]. [N.J.A.C. 7:27-22.16(o)]
65	Start-up Period: and emissions during start-up will be determined during compliance testing. In the event that the start-up emissions are higher than the steady state emissions, they may be incorporated in the permit without increasing the annual emissions from the turbines. [N.J.A.C. 7:27-22.16(a)]	Start-up Period: Monitored by stack emission testing once initially. [N.J.A.C. 7:27-22.16(0)]	Start-up Period: Recordkeeping by stack test results once initially. [N.J.A.C. 7:27-22.16(0)]	Submit a stack test report: Once initially. [N.J.A.C. 7:27-22.16(0)]

BOP080001

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
99	Shutdown Period: and emissions during shutdown will be determined during compliance testing. In the event that the shutdown emissions are higher than the steady state emissions, they may be incorporated in the permit without increasing the annual emissions from the turbines. [N.J.A.C. 7:27-22.16(a)]	Shutdown Period: Monitored by stack emission testing once initially. [N.J.A.C. 7:27-22.16(0)]	Shutdown Period: Recordkeeping by stack test results once initially. [N.J.A.C. 7:27-22.16(0)]	Submit a stack test report: Once initially. [N.J.A.C. 7:27-22.16(0)]
29	Shake down period: The emission limits specified in this permit are not applicable during initial shakedown period of each turbine individually. The initial shakedown period for each turbine is defined as the 180 day period beginning with the initial ignition of each combustion turbine. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.

BOP080001

New Jersey Department of Environmental Protection Facility Specific Requirements

U1 8 Simple Cycle Stationary Gas Turbines (used for electric power generation) Emission Unit:

OS1 Turbine No. 1 firing natural gas, OS2 Turbine No. 2 firing natural gas, OS3 Turbine No. 3 firing natural gas, OS4 Turbine No. 4 firing natural gas, OS5 Turbine No. 5 firing natural gas, OS6 Turbine No. 6 firing natural gas, OS7 Turbine No. 7 firing natural gas, OS8 Turbine No. 8 firing natural gas Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
-	Opacity <= 20 %. Smoke emissions from stationary turbine engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-3.5]	None.	None.	None.
2	Opacity <= 10 %, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	Particulate Emissions <= 60 lb/hr Particulate emission limit from the combustion of natural gas based on rated heat input of 603 MMBtu/hr for each turbine. [N.J.A.C. 7:27-4:2(a)]	Particulate Emissions: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	Particulate Emissions: Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C.
4	Maximum Gross Heat Input <= 603 MMBTU/hr (HHV) per turbine firing natural gas. [N.J.A.C. 7:27-22.16(0)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(0)]	None.
S	NOx (Total) <= 2.2 lb/MW-hr. NOx RACT emission limit applies during all periods of natual gas combustion. [N.J.A.C. 7:27-19.5(d)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. [N.J.A.C. 7:27-19.15(a)1]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
9	NOx (Total) <= 2.2 lb/MW-hr. NOx RACT emission limit applies during all periods of natual gas combustion. [N.J.A.C. 7:27-19.5(d)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/REF #1 & #2 for details). [N.J.A.C. 7:27-22.16(0)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
7	NOx (Total) <= 2.5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(0)]
8	NOx (Total) <= 2.5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
6	NOx (Total) <= 0.0092 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
10	NOx (Total) <= 0.0092 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]
11	NOx (Total) <= 5.55 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) <= 5.55 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
13	CO <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
14	CO <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]
15	CO <= 0.0112 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
16	CO <= 0.0112 lb/MMBTU. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]
17	CO <= 6.76 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
18	CO <= 6.76 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]

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19	VOC (7	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 and Ref. # 2 for details). [N.J.A.C.	VOC (Total): Recordkeeping by stack test results once initially. (Please see UI/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(0)]
20	VOC (Total) <= 1.93 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 and Ref. # 2 for details). [N.J.A.C.	VOC (Total): Recordkeeping by stack test results once initially. (Please see UI/OS Summary/Ref. #1 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(0)]
21	SO2 <= 1.22 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results once initially. (Please see U1/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-21.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see UI/OS Summary/ Ref. #1 for details). [N.J.A.C.
22	TSP <= 5 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially, based on each of three Department validated stack test runs. (Please see UI/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(o)]	TSP: Recordkeeping by stack test results once initially. (Please see UI/OS Summary/ Ref. #1 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule. (Please see UI/OS Summary/ Ref. #1 for details). [N.J.A.C.
23	PM-2.5 (Total) <= 5 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-2.5 (Total): Monitored by stack emission testing at the approved frequency, based on the average of three Department validated stack test runs. Once initially and every quarter thereafter. (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(0)]	PM-2.5 (Total): Recordkeeping by stack test results at the approved frequency. Once initially and every quarter thereafter. (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule. (Please see U1/OS Summary/ Ref. #1, 2 & 3 for details). [N.J.A.C. 7:27-22.16(o)]
24	PM-10 (Total) <= 5 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	PM-10 (Total): Recordkeeping by stack test results once initially and prior to permit renewal. (Please see U1/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]
25	Ammonia <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	Ammonia: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	Ammonia: Recordkeeping by stack test results once initially and prior to permit renewal. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. (Please see UI/OS Summary/ Ref. #1 & 2 for details). [N.J.A.C. 7:27-22.16(0)]

Date: 9/25/2009

New Jersey Department of Environmental Protection

Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	$HAPs \le 0.62 lb/hr$. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
27	Acrolein <= 0.004 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
28	Formaldehyde ≤ 0.43 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
29	Natural Gas Usage <= 2,777 MMft^3/yr per turbine. [N.J.A.C. 7:27-22.16(a)]	Natural Gas Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 365 day period (rolling I day basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C.	Natural Gas Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(0)]	None.
30	Hours of Operation While Firing Natural Gas <= 4,748 hr/yr minus three times the hours of operation on Ultra Low Sulfur Distillate (ULSD) oil. e.g Hours of operation on natural gas<= 4,748 hours/yr - 3 x (hours/yr on ULSD). [N.J.A.C. 7:27-22.16(a)]	Hours of Operation While Firing Natural Gas: Monitored by hour/time monitor daily, based on a consecutive 12 month period (rolling 1 month basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C.	Hours of Operation While Firing Natural Gas: Recordkeeping by manual logging of parameter or storing data in a computer data system continuously. [N.J.A.C. 7:27-22.16(a)]	

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

U1 8 Simple Cycle Stationary Gas Turbines (used for electric power generation) Emission Unit:

Operating Scenario:

OS9 Turbine No. 1 firing ultra low sulfur diesel fuel, OS10 Turbine No. 2 firing ultra low sulfur diesel fuel, OS11 Turbine No. 3 firing ultra low sulfur diesel fuel, OS12 Turbine No. 4 firing ultra low sulfur diesel fuel, OS13 Turbine No. 5 firing ultra low sulfur diesel fuel, OS15 Turbine No. 7 firing ultra low sulfur diesel fuel, OS16 Turbine No. 8 firing ultra low sulfur diesel fuel

(Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
Opac Smok engin exclu for a j secon	Opacity <= 10 %. Smoke emissions from stationary turbine engines no greater than 10% opacity, exclusive of visible condensed water vapor, for a period of more than 10 consecutive seconds. [N.J.A.C. 7:27- 3.5]	Opacity: Monitored by visual determination at the approved frequency, based on an instantaneous determination. Periodic Visual observations. Once every 100 hours of oil firing operation. Visual observations shall be conducted by certified smoke reader every 100 hours of oil firing operation using NJ Test Method 2. Monitoring and recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100 hour timeframe. However, in no case shall the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of oil firing operation, the reason for monitoring at the lesser frequency shall also be recorded. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by manual logging of parameter or storing data in a computer data system at the approved frequency Manual logging of Visual Observations in a permanently bound logbook or readily accessible computer memory. Once every 100 hours of ULSD fuel oil firing operation. Recordkeeping may occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., mighttime operation, weather conditions, unplanned dispatching, etc.) within the 100 hour timeframe. However, in no case shall the interval between visual determinations recording exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours of operation, the reason for monitoring at the lesser frequency shall also be recorded. [N.J.A.C. 7:27-22.16(0)]	None.
Parti 7:27.	Particulate Emissions <= 60 lb/hr. [N.J.A.C. 7:27-4.2(a)]	Particulate Emissions: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-4.4]	Particulate Emissions: Recordkeeping by stack test results once initially and prior to permit renewal. Refer to Stack Testing Requirements specified at UI OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(0)]
TSP	TSP <= 15 lb/hr. [N.J.A.C. 7:27-22.16(a)]	TSP: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. Refer to Stack Testing Requirements specified at UI OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(a)]	TSP: Recordkeeping by stack test results once initially and prior to permit renewal. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(a)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	PM-10 (Total) <= 15 lb/hr. [N.J.A.C. 7:27-22.16(0)]	PM-10 (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]	PM-10 (Total): Recordkeeping by stack test results once initially and prior to permit renewal. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]
5	VOC (Total) <= 3.27 lb/hr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]
9	VOC (Total) <= 4.5 ppmvd @ 15% 02. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(0)]	VOC (Total): Recordkeeping by stack test results once initially and prior to permit renewal. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results. As per the approved schedule. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(0)]
7	CO <= 6.4 lb/hr. [N.J.A.C. 7:27-21.16(o)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
∞	CO <= 6.4 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]
6	CO <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. Refer to Stack Testing Requirements specified at UI OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and prior to permit renewal. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Stack Testing Requirements specified in this permit. [N.J.A.C. 7:27-8.13(d)3]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	CO <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. Refer to CEM requirements specified in this permit. [N.J.A.C.
11	NOx (Total) <= 3 lb/MW-hr. NOx RACT emission limit applies during all periods of fuel oil combustion. [N.J.A.C. 7:27-19.5(d)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a calendar day (in ozone season) or 30 day rolling (at other times) average. [N.J.A.C. 7:27-19.15(a)1]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(0)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. [N.J.A.C. 7:27-22.16(o)]
12	NOx (Total) <= 10.45 lb/hr. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and prior to permit renewal, based on the average of three Department validated stack test runs. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(0)]	NOx (Total): Recordkeeping by stack test results once initially and prior to permit renewal. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Stack Testing Requirements specified at U1 OS Summary Reference Nos. 1 and 2. [N.J.A.C. 7:27-22.16(0)]
13	NOx (Total) <= 5 ppmvd @ 15% O2. [N.J.A.C. 7:27-21.16(a)]	NOx (Total): Monitored by continuous emission monitoring system continuously, based on a 3 hour rolling average based on a 1 hour block average. [N.J.A.C. 7:27-22.16(o)]	NOx (Total): Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(o)]	Submit an Excess Emissions and Monitoring Systems Performance Report (EEMPR): Every April 30, July 30, October 30, and January 30 for the preceding quarter year (the quarter years begin on January 1, April 1, July 1, and October 1) electronically through the NJDEP online EEMPR web portal. Refer to CEM requirements specified in this permit. [N.J.A.C.
14	NOx (Total) <= 0.18 lb/MW-hr except for periods of start-up, shutdown and fuel transfer as defined in this permit. [N.J.A.C. 7:27-22.16(a)]	NOx (Total): Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. [N.J.A.C. 7:27- 8.13(d)1]	NOx (Total): Recordkeeping by stack test results once initially and every 5 years. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Stack Testing Requirements specified in this permit. [N.J.A.C. 7:27-8.13(d)3]

Sol Applicable Requirement Monitoring Requirement Recordkeeping Requirement Submittal/Action Submittal/Action Sol Applicable Requirement Submittal/Action Sol Applicable Requirement Submittal/Action Sol Applicable Requirement Submittal/Action Sol Applicable Requirement Submittal/Action Sol Applicable Regular Submittal/Action Sol Application Appl				-	
802 = 0.8 lb/hr. [N.J.A.C. 727-22.16(o)] 802. Managanese compounds <= 0.425 lb/hr. Managanese compounds <= 0.425 lb/hr. None. N	Ref.#	Ì	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
None. Non	15	SO2 <= 0.8 lb/hr. [N.J.A.C. 7:27-22.16(o)]	SO2: Monitored by stack emission testing once initially and prior to permit renewal, based on each of three Department validated stack test runs. [N.J.A.C. 7:27-22.16(0)]	SO2: Recordkeeping by stack test results once initially and prior to permit renewal. [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to Stack Testing Requirements specified in this permit. [N.J.A.C. 7:27-22.16(0)]
Pb ← 0,0075 lb/hr. [N.J.A.C. Hours of Operation While Fring Fuel Oil: Monitored by hour/time monitor daily, and the full claim of a consecutive 1.2 monitors daily, and the full claim of a consecutive 1.2 monitors daily and an eonsecutive 1.2 monitors daily and the full claim of the full claim of the full contain the monitor daily. The permitee shall be fired only during the periods of install, calibrate and maintain the monitors of the full claim of the full contain the monitors of the full contain the monitors of the full contain the full contain the full contain the monitors of the full contain the full contain the full contain the annitors of the full contain the full contain in Fuel (~ 7.27-22.16(a)] Fuel Oil Usage ←2.75 MMgallyr per Fuel Oil Usage. Monitored by fuel turbine. [N.J.A.C. 7.27-22.16(a)] Fuel Oil Usage ←2.75 MMgallyr per Fuel Oil Usage. Monitored by fuel containing the install, calibrate and maintain the monitors of shall be receded by the sum of the inaccordance with the manufacturer's storage each month during operation. The fooling in month basis.) The permitee shall gallons speam on some during any one month specifications. The permitee shall gallons speam on the graphoroximately mid-scale of the full range acounting, such as fiscal month, calcadar month or production month. One selected, the period of full delivery expects and maintain the monitors of shall be encludated by the sum of the allons consumed during any one month specifications. The permitee shall select the time period for current/voltage output. [N.J.A.C. 7.27-22.16(o)] Sulfur Content in Fuel ← 0.2 weight % For Sulfur Content in Fuel: Monitored by review for full content in Fuel: Rocordance with the monitory specification receipts per delivery. [P.J.J.A.C. 7.27-9.2(b)]	16	Manganese compounds <= 0.425 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
Hours of Operation While Firing Fuel Oil Hours of Operation While Firing Fuel Oil Amonitored by hour/time monitor daily, based on a consecutive 12 month basis). The permittee shall be fired only during the periods of in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7.27-22.16(o)] Fuel Oil Usage <= 2.75 MMgal/yr per Fuel Oil Usage. Monitored by fuel turbine. [N.J.A.C. 7.27-22.16(a)] Fuel Oil Usage <= 2.75 MMgal/yr per Fuel Oil Usage. Monitored by fuel turbine. [N.J.A.C. 7.27-22.16(a)] Fuel Oil Usage on the full range current/voltage output. [N.J.A.C. 7.27-22.16(a)] Fuel Oil Usage set of the full range current/voltage output. [N.J.A.C. 7.27-22.16(a)] Fuel Oil Usage set of the full range current/voltage output. [N.J.A.C. 7.27-22.16(a)] Fuel Oil Usage with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range accounting operation. The furbine and maintain the monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range accounting. Sulfur Content in Fuel <= 0.2 weight % For Sulfur Content in Fuel set of the full range accounting such as fiscal month, calendar month or production month. Once selected, proving the preceding I month basis. The permittee shall select the furne period for current/voltage output. [N.J.A.C. 7.27-22.16(o)] Sulfur Content in Fuel <= 0.2 weight % For Sulfur Content in Fuel Recordscepting by data and maintain the monitor(s) shall be ranged surfured the period of the period must not be changed without prior approval furth the Department. [N.J.A.C. 7.27-2.2.16(o)] Sulfur Content in Fuel set of the full range accounting such as fiscal month, calendar month of the period must not be changed without prior approval furth the period for current in Fuel set of the full set of the feel very set of the fuel feel very set of t	17	Pb <= 0.0075 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
Fuel Oil Usage <= 2.75 MMgal/yr per flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-9.2(b)] Sulfur Content in Fuel <= 0.2 weight % For Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-9.2(b)]	18	Hours of Operation While Firing Fuel Oil <= 720 hr/yr. The Ultra Low Sulfur Diesel (ULSD) oil shall be fired only during the periods of natural gas curtailment. [N.J.A.C. 7:27-22.16(o)]	Hours of Operation While Firing Fuel Oil: Monitored by hour/time monitor daily, based on a consecutive 12 month period (rolling 1 month basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C.	Hours of Operation While Firing Fuel Oil: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	None.
Sulfur Content in Fuel <= 0.2 weight % For Zone 4. [N.J.A.C. 7:27- 9.2(b)] [N.J.A.C. 7:27- 9.2(b)] [N.J.A.C. 7:27- 9.2(b)]	19	Fuel Oil Usage <= 2.75 MMgal/yr per turbine. [N.J.A.C. 7:27-22.16(a)]	Fuel Oil Usage: Monitored by fuel flow/firing rate instrument continuously, based on a consecutive 12 month period (rolling 1 month basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Fuel Oil Usage: Recordkeeping by data acquisition system (DAS) / electronic data storage each month during operation. The gallons per any consecutive 12-month period shall be calculated by the sum of the gallons consumed during any one month added to the sum of the gallons consumed during the preceeding 11 months. The permittee shall select the time period for accounting, such as fiscal month, calendar month or production month. Once selected, the period must not be changed without prior approval fim the Department. [N.J.A.C. 7:27-22.16(0)]	
	20	Sulfur Content in Fuel <= 0.2 weight % For Zone 4. [N.J.A.C. 7:27- 9.2(b)]			

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
21	Hours of Operation While Firing Fuel Oil Annitored by hour/time monitor 7:27-22.16(a)] 7:27-22.16(a)] The permittee shall install, calibra maintain the monitor(s) in accordath maintain the monitor(s) in accordath monitor(s) shall be ranged such that allowable value is approximately of the full range current/voltage of INJ.A.C. 7:27-22.16(o)]	Hours of Operation While Firing Fuel Oil: Hours of Operation While Firing Fuel Oil: Monitored by how/time monitor (CAS) feetronic data acquisition system continuously, based on one calendar day. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output.	Hours of Operation While Firing Fuel Oil: Recordkeeping by data acquisition system (DAS) / electronic data storage daily. [N.J.A.C. 7:27-22.16(o)]	None.

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

Emission Unit: U2 1 MW Emergency Generator

Operating Scenario: OS Summary

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 0.01 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	PM-10 (Total) <= 0.01 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
3	VOC (Total) \leq 0.01 tons/yr. [N.J.A.C. 7.27-22.16(a)]	None.	None.	None.
4	NOx (Total) ≤ 3.47 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	$CO \le 1.92 \text{ tons/yr. [N.J.A.C.}$ 7:27-22.16(a)]	None.	None.	None.
9	SO2 <= 0.004 tons/yr. [N.J.A.C. 7.27-22.16(a)]	None.	None.	None.
r-	The owner or operator of a 2007 model year and later emergency generator with a displacement of < 10 liters per cylinder and a maximum engine power >= 37 kW (>= 50 HP) and no greater than 3,000HP (<= 2,237 kW) must comply with the certification emissions standards in 40 CFR 89.112 and smoke standards in 40 CFR 89.113 for the same model year and maximum engine power as follows: NMHC + NOx <= "4.8" g/HP-hr, CO <= "2.6" g/HP-hr, PM <= "0.15" g/HP-hr, RO CFR 60.4205(b)]	None.	Other: The owner or operator of a 2007 model year or later engine must keep manufacturer certification showing compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211].	None.
∞	The owner or operator of a 2007 model year and later stationary CI internal combustion engine complying with the emission standards specified in 40 CFR 60.4204(b) or 40 CFR 60.4205(b), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b) or 40 CFR 60.4205(b) as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]	None.	Other: The owner or operator must keep documentation for the life of the equipment from the manufacturer that the engine is certified to meet the emission standards as applicable, for the same model year and maximum engine power. [40 CFR 60.4211(c)].	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Emergency generators may be operated for the purpose of maintenance checks and readiness testing limited to 100 hours per year, provided that those tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. [40 CFR 60.4211(e)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must record the time of operation of the emergency engine and the reason the engine was in operation during that time. Starting with the model year 2011, 2012, or 2013, depending on the size of the engine as provided in Table 5 in NSPS IIII, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter if the emergency engine does not meet the standards in 40 CFR 60.4204, applicable to non-emergency engines, in the applicable model year. [40 CFR 60.4214(b)]	None.
10	The emergency generators may be operated in emergency situations as defined in 40 CFR 60.4219. For emergency engines not meeting emission standards in 40 CFR 60.4204, any operation other than emergency operation and maintenance and testing as permitted in 40 CFR 60.4211(e), is prohibited. [40 CFR 60.4211(e)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]	None.	None.
11	A new or reconstructed stationary RICE located at an area HAP source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63.6590(c)]	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	None.

Date: 9/25/2009

New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit: U2 1 MW Emergency Generator

Operating Scenario: OS1 1 MW Emergency Generator firing diesel fuel

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-3.5]	None.	None.	None.
2	Particulate Emissions <= 1.79 lb/hr. [N.J.A.C. 7:27- 4:2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(0)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(o)]	None.
4	The emergency generator shall be located at the facility and produce mechanical or thermal energy, or electrical power exclusively for use at the facility. This	Monitored by hour/time monitor continuously. [N.J.A.C. 7:27-22.16(0)]	Other: The Permittee shall maintain on site and record in a logbook or computer data system, the following information:	None.
	emergency generator shall be operated only: 1. During the performance of normal testing		1. For each time the emergency generator is specifically operated for testing or maintenance:	
	and maintenance procedures, as recommended in writing by the manufacturer and/or as required in writing		i. The reason for its operation;	
	by a Federal or State law or regulation,		ii. The date(s) of operation and the start up and shut down time;	
	2. When there is power outage or the primary source of mechanical or thermal energy fails because of an emergency, or		iii. The total operating time for testing or maintenance based on the generator's hour meter; and	
	3. When there is a voltage reduction issued by PJM and posted on the PJM internet website (www.pim.com) under the		iv. The name of the operator; and	
	"emergency procedures" menu. [N.J.A.C. 7:27-19.1]		2. If a voltage reduction is the reason for the use of the emergency generator, a copy of the voltage reduction notification from PJM or other documentation of the voltage reduction.	
			[N.J.A.C. 7:27-19.11].	

BAYONNE ENERGY CTR (12863)

BOP080001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	This emergency generator shall not be used:	None.	None.	None.
	1. For normal testing and maintenance on days when the Department forecasts air quality anywhere in New Jersey to be "unhealthy for sensitive groups," "unhealthy," or "very unhealthy" as defined in the EPA's Air Quality Index at http://airnow.gov/, as supplemented or amended and incorporated herein by reference, unless required in writing by a Federal or State law or regulation. Procedures for determining the air quality forecasts for New Jersey are available at the Department's air quality permitting web site at http://www.state.nj.us/dep/aqpp/aqforecast; and			
	2. As a source or energy or power after the primary energy or power source has become operable again. If the primary energy or power source is under the control of the owner or operator of the emergency generator, the owner or operator shall make a reasonable, timely effort to repair the primary energy or power source. [N.J.A.C. 7:27-19.2(d)]			
9	The Permittee shall, once per month, record the total operating time from the generator's hour meter. [N.J.A.C. 7:27-19.11]	Monitored by hour/time monitor continuously . [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation. The Permittee shall maintain on site a record of the total operating time from the generator's hour meter. Once per month. [N.J.A.C. 7:27-19.11]	None.
_	Hours of Operation While Firing Diesel <= 500 hr/yr. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation While Firing Diesel: Monitored by hour/time monitor daily, based on a 12 calendar month period. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(0)]	Hours of Operation While Firing Diesel: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(o)]	

Date: 9/25/2009

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
∞	Maximum Gross Heat Input <= 4.01 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(0)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(0)]	None.
6	NOx (Total) <= 13.9 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	CO <= 7.69 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
11	$TSP \le 0.06 \text{ lb/hr. [N.J.A.C. 7:27-22.16(a)]}$	None.	None.	None.
12	PM-2.5 (Total) <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	PM-10 (Total) <= 0.06 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
41	Sulfur Content in Fuel <= 0.0015 % by weight. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(0)]	Fuel: Monitored by review Records of the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil as specified at 40 CFR Part 60.41c shall be maintained. Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7.27-22.16(0)]	None.
15	Emergency generator fuel limited to ultra low sulfur distillate fuel oil (ULSD) [sulfur content <= 15 ppm]. [N.J.A.C. 7.27-22.16(a)]	None.	None.	None.

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

U3 210 HP Fire Pump Emission Unit:

OS Summary Operating Scenario:

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	TSP <= 0.02 tons/yr. [N.J.A.C. 7:27-8.13(h)]	None.	None.	None.
2	PM-10 (Total) <= 0.02 tons/yr. [N.J.A.C. 7:27-21.16(a)]	None.	None.	None.
3	VOC (Total) <= 0.02 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
4	NOx (Total) <= 0.57 tons/yr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
5	$CO \le 0.05 \text{ tons/yr. [N.J.A.C.}$ 7:27-22.16(a)]	None.	None.	None.
9	The owner or operator of a fire pump engine with a displacement of less than 30 liters per cylinder must comply with the emissions standards in table 4 to NSPS IIII for the same model year and nameplate engine power as follows: NMHC + NOx <= "7.8" g/HP-hr, CO <= "2.6" g/HP-hr, PM <= "0.40" g/HP-hr. [40 CFR 60.4205(c)]	None.	Other: The owner or operator of a pre 2007 model year engine must keep documentation demonstrating compliance with the applicable emission standards, for the same model year and maximum engine power. [40 CFR 60.4211].	None.
7	Owners and operators of stationary CI internal combustion engines must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60.4206]	None.	Other: The owner or operator shall keep the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine. [40 CFR 60.4206].	None.

Date: 9/25/2009

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	Beginning October 1, 2007, the CI internal combustion engines subject to NSPS IIII that use diesel fuel must use diesel fuel that contains the following per gallon standards: 500 ppm (0.05 percent) maximum sulfur content and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(a)]	Monitored by review of fuel delivery records once per bulk fuel shipment. For each diesel delivery received, the owner operator shall review written documentation of the delivery to ensure the maximum allowable fuel oil sulfur content and either a minimum cetane index or a maximum aromatic content is not being exceeded. Such written documentation can include, but is not limited to: bill of lading, delivery Invoice, certificate of analysis. [N.J.A.C. 7:27-8.13(a)]	Recordkeeping by invoices / bills of lading once per bulk fuel shipment. The owner or operator shall keep records of fuel showing oil sulfur content and either a minimum cetane index or a maximum aromatic content for each delivery received. All records must be maintained for a minimum of 2 years following the date of such records per 40 CFR 60.7(f). [N.J.A.C. 7:27-8.13(a)]	None.
6	Beginning October 1, 2010, the CI internal combustion engines with a displacement of less than 30 liters per cylinder subject to NSPS III that use diesel fuel must use diesel fuel that contains the following per gallon standards: 15 ppm (0.0015 percent) maximum sulfur content and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]	Monitored by review of fuel delivery records once per bulk fuel shipment. For each diesel delivery received, the owner or operator shall review written documentation of the delivery to ensure the maximum allowable fuel oil sulfur content and either a minimum cetane index or a maximum aromatic content is not being exceeded. Such written documentation can include, but is not limited to: bill of lading, delivery invoice, certificate of analysis. [N.J.A.C. 7:27-8.13(a)]	Recordkeeping by invoices / bills of lading once per bulk fuel shipment. The owner or operator shall keep records of fuel showing oil sulfur content and either a minimum cetane index or a maximum aromatic content for each delivery received. All records must be maintained for a minimum of 2 years following the date of such records per 40 CFR 60.7(f). [N.J.A.C. 7:27-8.13(a)]	None.
10	The owner or operator that must comply with the emission standards specified in NSPS III must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner or operator must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable. [40 CFR 60.4211(a)]	None.	Other: The owner or operator shall keep the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. [40 CFR 60.4211(a)].	None.

Date: 9/25/2009

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	The owner or operator of a fire pump engine that was manufactured during or after the model year that applies to the engine power rating in table 3 to NSPS IIII and must comply with the emission standards in 40 CFR 60.4205(c), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(c), for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]	None.	Other: The owner or operator must keep documentation for the life of the equipment from the manufacturer that the engine is certified to meet the emission standards. [40 CFR 60.4211(c)].	None.
12	Emergency stationary internal combustion engines may be operated for the purpose of maintenance checks and readiness testing limited to 100 hours per year, provided that those tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. [40 CFR 60.4211(e)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The owner or operator must record the time of operation of the emergency engine and the reason the engine was in operation during that time. Starting with the model year 2011, 2012, or 2013, depending on the size of the engine as provided in Table 5 in NSPS IIII, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter if the emergency engine does not meet the standards in 40 CFR 60.4204 applicable to non-emergency in the applicable model year. [40 CFR 60.4214(b)]	None.
13	The emergency stationary internal combustion engines may be operated in emergency situations as defined in 40 CFR 60.4219. For emergency engines not meeting emission standards in 40 CFR 60.4204, any operation other than emergency operation and maintenance and testing as permitted in 40 CFR 60.4211(e), is prohibited. [40 CFR 60.4211(e)]	Monitored by hour/time monitor continuously. The owner or operator of an emergency stationary internal combustion engine must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]	None.	None.

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	A new or reconstructed stationary RICE located at an area HAP source must meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines or 40 CFR 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63. [40 CFR 63. 6390(c)]	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	Other: Comply with all applicable provisions at NSPS IIII. [40 CFR 63].	None.

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 9/25/2009

Emission Unit: U3 210 HP Fire Pump

Operating Scenario: OS1 210 HP Fire Pump Combusting Diesel Fuel

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Opacity <= 20 %. Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. [N.J.A.C. 7:27-3.5]	None.	None.	None.
2	Particulate Emissions \leq 0.32 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Sulfur Content in Fuel <= 0.2 % by weight. [N.J.A.C. 7:27- 9.2(b)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(0)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(0)]	None.
4	Sulfur Content in Fuel <= 0.0015 % by weight. [N.J.A.C. 7:27-22.16(a)]	Sulfur Content in Fuel: Monitored by review of fuel delivery records per delivery. [N.J.A.C. 7:27-22.16(0)]	Sulfur Content in Fuel: Recordkeeping by fuel certification receipts per delivery. [N.J.A.C. 7:27-22.16(0)]	None.
\$	Maximum Gross Heat Input <= 0.53 MMBTU/hr (HHV). [N.J.A.C. 7:27-22.16(a)]	Maximum Gross Heat Input: Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	Maximum Gross Heat Input: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(0)]	None.
6	NOx (Total) <= 2.3 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
7	CO <= 0.19 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
~	VOC (Total) <= 0.08 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
6	TSP ≤ 0.07 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
10	PM-2.5 (Total) <= 0.07 lb/hr. [N.J.A.C. 7.27-22.16(a)]	None.	None.	None.
11	PM-10 (Total) <= 0.07 lb/hr. [N.J.A.C. 7.27-22.16(a)]	None.	None.	None.
12	Emergency fire pump fuel limited to ultra low sulfur distillate fuel oil (ULSD) [sulfur content <= 15 ppm]. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
13	Hours of Operation While Firing Diesel <= 500 hr/yr. [N.J.A.C. 7:27-22.16(a)]	Hours of Operation While Firing Diesel: Monitored by hour/time monitor continuously, based on a 12 calendar month period. [N.J.A.C. 7:27-22.16(0)]	Hours of Operation While Firing Diesel: Recordkeeping by manual logging of parameter or storing data in a computer data system annually. [N.J.A.C. 7:27-22.16(0)]	None.

Date: 9/25/2009

BAYONNE ENERGY CTR (12863) BOP080001

New Jersey Department of Environmental Protection Facility Profile (General)

Facility Name (AIMS): Bayonne Energy Center Facility ID (AIMS): 12863

Street 410 HOOK RD

Address: BAYONNE, NJ 07002

Mailing ATTN NEIL COLLINS

Address: C/O PURE ENERGY RESOURCES

25 MALL RD, SUITE 100 BURLINGTON, MA 01803

County: Hudson

Location Description:

State Plane Coordinates:

X-Coordinate: 605,375 Y-Coordinate: 663,055 Units: Feet

Datum: NAD83

Source Org.: Source Type:

Industry:

Primary SIC: 4911

Secondary SIC:

NAICS: 221112

Date: 9/25/2009

BAYONNE ENERGY CTR (12863) BOP080001

Email:

New Jersey Department of Environmental Protection Facility Profile (General)

Contact Type: Consultant		
Organization: AMEC Earth & Environmental		Org. Type: Corporation
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Title: Senior Project Manager		
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Contact Type: Environmental Officer		
Organization: Pure Energy Resources, LLC		Org. Type: LLC
Name: Neil Collins		NJ EIN:
Title: Director, Permitting & Community Outreach		
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Fax: (781) 229-0442 x	Address:	c/o Pure Energy Resources 25 Mall Road, Suite 100
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Email: ncollins@pureenergyresources.com		
Contact Type: Owner (Current Primary)		
Organization:		Org. Type: LLC
Name: Bayonne Energy Center, LLC		NJ EIN:
Title:		
Phone: () - x	Mailing	Bayonne Energy Center, LLC
Fax: () - x	Address:	c/o Pure Energy Resources 25 Mall Road, Suite 100
Other: () - x		Burlington, MA 01803
Type:		

BAYONNE ENERGY CTR (12863)Date: 9/25/2009

BOP080001

New Jersey Department of Environmental Protection Facility Profile (General)

Contact Type: Responsible Official

Organization: Bayonne Energy Center, LLC Org. Type: LLC

Name: Paul Barnett NJ EIN:

Title: Responsible Official

Phone: (781) 229-4317 x

Mailing
Bayonne Energy Center

c/o Pure Energy Resources

Address: 25 Mail Pand Spite 100

Other: () - x 25 Mall Road, Suite 100 Burlington, MA 01803

Type: Email:

New Jersey Department of Environmental Protection Non-Source Fugitive Emissions

Description of Activity Causing Emission	Location Description	VOC (Total)	NOX	00	Reasonab	le Estimate TSP (Total)	Reasonable Estimate of Emissions (tpy) SO TSP PM-10 Pb (Total)	ions (tpy) Pb	HAPS (Total)	Other (Total)
T	Total	0.000	0.000	0.000	0.000	0.000 0.000 0.000 0.000	0.000	0.000 0.000	0.000000000	0.000

BAYONNE ENERGY CTR (12863) BOP080001

New Jersey Department of Environmental Protection Insignificant Source Emissions

	Other (Total)	0.000	0.000	0.000	0.000
	HAPS (Total)	0.00000000	0.00000000	0.00000000	0.000000000
	Pb	0.000	0.000	0.000	0.000
Estimate of Emissions (tpy)	PM-10	0.000	0.000	0.000	0.000
te of Emis	TSP	0.000	0.000	0.000	0.000
Estima	OS	0.000	0.000	0.000	0.000
	00	0.000	0.000	0.000	0.000
	NOX	0.000	0.000	0.000	0.000
	VOC (Total)	0.110	000'0	0.000	0.110
Location	Description				
Equipment Type		Storage Vessel	Storage Vessel	Other Equipment	Total
Source/Group	Description	250,00 galllon Diesel Storage Vessel Fuel Storage Tank (<0.02 psia)	10,000 gallon Aqueous Storage Vessel Ammonia Storage Tank	Water Treatment System	
IS		ISI	IS2	IS3	

New Jersey Department of Environmental Protection Equipment Inventory

Facility's Ec Designation De	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand- Fathered	Last Mod. (Since 1968)	Equip. Set ID
Single Cycle Combustion Turbine		Combustion Turbine		3/1/2010	No		
Turbine 2 Single Cycle Combustion Turbine		Combustion Turbine		3/1/2010	No		
Turbine 3 Single Cycle Combustion Turbine	_	Combustion Turbine		3/1/2010	No		
Turbine 4 Single Cycle Combustion Turbine)	Combustion Turbine		3/1/2010	No		
Turbine 5 Single Cycle Combustion C Turbine	С	Combustion Turbine		3/1/2010	No		
Turbine 6 Single Cycle Combustion C Turbine	С	Combustion Turbine		3/1/2010	No		
Turbine 7 Single Cycle Combustion Turbine)	Combustion Turbine		3/1/2010	No		
Turbine 8 Single Cycle Combustion Turbine	•	Combustion Turbine		3/1/2010	No		
1 MW Emergency Generator		Emergency Generator		3/1/2010	No		
Fire Pump 210 HP Fire Pump		Emergency Generator		3/1/2010	No		

Date: 9/25/2009

New Jersey Department of Environmental Protection Control Device Inventory

lod. CD Set ID																			_
Last Mod. (Since 1968)																			-
Grand- Fathered	No	No	No																
Install Date	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	3/1/2010	
CD Type	Other	Selective Catalytic Reduction	Oxidizer (Catalytic)																
Description	Water Injection Turbine 1	Selective Catalytic Reduction Turbine 1	Oxidation Catalyst 1	Water Injection Turbine 2	Selective Catalytic Reduction Turbine 2	Oxidation Catalyst 2	Water Injection Turbine 3	Selective Catalytic Reduction Turbine 3	Oxidation Catalyst 3	Water Injection Turbine 4	Selective Catalytic Reduction Turbine 4	Oxidation Catalyst 4	Water Injection Turbine 5	Selective Catalytic Reduction Turbine 5	Oxidation Catalyst 5	Water Injection Turbine 6	Selective Catalytic Reduction Turbine 6	Oxidation Catalyst 6	
Facility's Designation	Water 1	SCR 1	Ox Cat 1	Water 2	SCR 2	Ox Cat 2	Water 3	SCR 3	Ox Cat 3	Water 4	SCR 4	Ox Cat 4	Water 5	SCR 5	Ox Cat 5	Water 6	SCR 6	Ox Cat 6	
CD NJID	CD101	CD102	CD103	CD201	CD202	CD203	CD301	CD302	CD303	CD401	CD402	CD403	CD501	CD502	CD503	CD601	CD602	CD603	

New Jersey Department of Environmental Protection Control Device Inventory

CD NJID	Facility's Designation	Description	CD Type	Install Date	Grand- Fathered	Grand- Last Mod. Fathered (Since 1968)	CD Set ID
CD702	SCR 7	Selective Catalytic Reduction Turbine 7	Selective Catalytic Reduction	3/1/2010	No		
CD703	Ox Cat 7	Oxidation Catalyst 7	Oxidizer (Catalytic)	3/1/2010	No		
CD801	Water 8	Water Injection Turbine 8	Other	3/1/2010	No		
CD802	SCR 8	Selective Catalytic Reduction Turbine 8	Selective Catalytic Reduction	3/1/2010	No		
CD803	Ox Cat 8	Oxidation Catalyst 8	Oxidizer (Catalytic)	3/1/2010	oN		

New Jersey Department of Environmental Protection Emission Points Inventory

TA V	Facility's	Description	Config.	Equiv.	Height	Dist. to	Exhaust	Exhaust Temp. (deg. F)	deg. F)	Exha	Exhaust Vol. (acfm)	cfm)	Discharge	PT
	Designation			(in.)	(III)	Line (ft)	Avg.	Min.	Max.	Avg.	Min.	Max.		
PT1	Turbine 1	Turbine 1 Emission Point	Round	132	151	06	800.0	708.0	800.0	755,655.0	698,978.0	849,848.0 Up	dN	
PT2	Turbine 2	Turbine 2 Emission Point	Round	132	151	116	800.0	708.0	800.0	755,655.0	698,978.0	849,848.0 Up	Up	
PT3	Turbine 3	Turbine 3 Emission Point	Round	132	151	117	800.0	708.0	800.0	755,655.0	698,978.0	849,848.0 Up	dn	
PT4	Turbine 4	Turbine 4 Emission Point	Round	132	151	129	800.0	708.0	800.0	755,655.0	698,978.0	849,848.0 Up	Up	
PT5	Turbine 5	Turbine 5 Emission Point	Round	132	151	130	800.0	708.0	800.0	755,655.0	698,978.0	849,848.0 Up	dn	
PT6	Turbine 6	Turbine 6 Emission Point	Round	132	151	91	800.0	708.0	800.0	755,655.0	698,978.0	849,848.0 Up	Up	
PT7	Turbine 7	Turbine 7 Emission Point	Round	132	151	91	800.0	708.0	800.0	755,655.0	698,978.0	849,848.0 Up	Up	
PT8	Turbine 8	Turbine 8 Emission Point	Round	132	151	130	800.0	708.0	800.0	755,655.0	0.879,820	849,848.0 Up	Up	
PT9	Em Gen	Emergency Generator Emission Point	Round	8	20	10	932.7	932.7	932.7	7,836.3	7,836.3	7,836.3 Up	dΩ	
PT10	Fire Pump	Fire Pump Emission Point	Round	4	20	99	1,076.0	1,076.0	1,076.0	0.869	0.869	dO 0.869	ďŊ	

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U 1 8 Turbines 8 Simple Cycle Stationary Gas Turbines (used for electric power generation)

							Annual		Flow	W	Temp.	ď
Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Oper. Hours Min. Max.	VOC Range Min.		(acfm) Max.	(deg F) Min. Ma	F) Max.
Turb 1 - Gas	Turbine No. 1 firing natural gas	Normal - Steady State	E1	CD101 (P) CD102 (S) CD103 (T)	PT1		0.0 4,748.0		755,655.0	848,898.0	709.0	800.0
Turb 2 - Gas	Turbine No. 2 firing natural gas	Normal - Steady E2 State	E2	CD201 (P) CD202 (S) CD203 (T)	PT2		0.0 4,748.0	0.	755,655.0	848,898.0	709.0	800.0
Turb 3 - Gas	Turbine No. 3 firing natural gas	Normal - Steady E3 State	Е3	CD301 (P) CD302 (S) CD303 (T)	PT3		0.0 4,748.0		755,655.0	848,898.0	709.0	800.0
Turb 4 - Gas	Turbine No. 4 firing natural gas	Normal - Steady E4 State	E4	CD401 (P) CD402 (S) CD403 (T)	PT4		0.0 4,748.0		755,655.0	848,898.0	709.0	800.0
Turb 5 - Gas	Turbine No. 5 firing natural gas	Normal - Steady E5 State	E5	CD501 (P) CD502 (S) CD503 (T)	PT5		0.0 4,748.0		755,655.0	848,898.0	709.0	0.008
Turb 6 - Gas	Turbine No. 6 firing natural gas	Normal - Steady E6 State	Е6	CD601 (P) CD602 (S) CD603 (T)	PT6		0.0 4,748.0		755,655.0	848,898.0	709.0	0.008
Turb 7 - Gas	Turbine No. 7 firing natural gas	Normal - Steady E7 State	E7	CD701 (P) CD702 (S) CD703 (T)	PT7		0.0 4,748.0		755,655.0	848,898.0	709.0	800.0
Turb 8 - Gas	Turbine No. 8 firing natural gas	Normal - Steady E8 State	E8	CD801 (P) CD802 (S) CD803 (S)	PT8		0.0 4,748.0		755,655.0	848,898.0	709.0	800.0

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U 1 8 Turbines 8 Simple Cycle Stationary Gas Turbines (used for electric power generation)

								Annual	al		Flow	Temp.	-ф
NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Oper. Hours Min. Max.		VOC (ao Range Min.	(acfm) Max.	(deg F) Min. Mi	g F) Max.
	Turb 1 - Oil	Turbine No. 1 firing ultra low sulfur diesel fuel	Normal - Steady E1 State	E1	CD101 (P) CD102 (S) CD103 (T)	PT1		0.0	720.0	698,978.0	760,221.0	708.0	800.0
0810	Turb 2 - Oil	Turbine No. 2 firing ultra low sulfur diesel fuel	Normal - Steady E2 State	E2	CD201 (P) CD202 (S) CD203 (T)	PT2		0.0	720.0	698,978.0	760,221.0	708.0	800.0
OS11	Turb 3 - Oil	Turbine No. 3 firing ultra low sulfur diesel fuel	Normal - Steady E3 State	E3	CD301 (P) CD302 (S) CD303 (T)	PT3		0.0	720.0	698,978.0	760,221.0	708.0	800.0
OS12	Turb 4 - Oil	Turbine No. 4 firing ultra low sulfur diesel fuel	Normal - Steady E4 State	E4	CD401 (P) CD402 (S) CD403 (T)	PT4		0.0	720.0	698,978.0	760,221.0	708.0	800.0
OS13	Turb 5 - Oil	Turbine No. 5 firing ultra low sulfur diesel fuel	Normal - Steady E5 State	E5	CD501 (P) CD502 (S) CD503 (T)	PT5		0.0	720.0	698,978.0	760,221.0	708.0	800.0
OS14	Turb 6 - Oil	Turbine No. 6 firing ultra low sulfur diesel fuel	Normal - Steady E6 State	E6	CD601 (P) CD602 (S) CD603 (T)	PT6		0.0	720.0	698,978.0	760,221.0	708.0	800.0
OS15	Turb 7 - Oil	Turbine No. 7 firing ultra low sulfur diesel fuel	Normal - Steady E7 State	E7	CD701 (P) CD702 (S) CD703 (T)	PT7		0.0	720.0	698,978.0	760,221.0	708.0	800.0

17863)

Date: 9/25/2009

BAYONNE ENERGY CTR (12863) BOP080001

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U 1 8 Turbines 8 Simple Cycle Stationary Gas Turbines (used for electric power generation)

SOn	Facility's	SON	Operation	Signif.	Control	Emission	Č	Annual Oper. Hours		Fi VOC (a	Flow (acfm)	Temp. (deg F)	ē.
NJID	Designation	Description	Type	Equip.	Device(s)	Point(s)	SCC(s)	Min. Max.		Min.	Max.	M	Max.
	Turb 8 - Oil	Turb 8 - Oil Turbine No. 8 firing ultra Normal - Steady E8 low sulfur diesel fuel State	Normal - Steady State	E8	CD801 (P) CD802 (S) CD803 (T)	PT8		0.0	0.0 720.0	698,978.0	698,978.0 760,221.0 708.0	708.0	800.0

U 2 Em Gen 1 MW Emergency Generator

	Facility's	SOI	Operation	Signif	Control	Emission	i	Annual Oper, Hours	ial Fours	OA	Flow (acfm)	E. ¥	Temp. (deg F)	р. F)
Design	esignation	Description	Type	Equip.	Device(s)	Point(s)	SCC(s)	Min. Max.	Max.	Range	Min.	Max.	Mi	Max.
Em Gen	_	1 MW Emergency Generator firing diesel fuel	Normal - Steady E9 all State	E9		PT9		0.0	500.0		7,836.3	7,836.3 932.7	932.7	932.7

Date: 9/25/2009

BAYONNE ENERGY CTR (12863)

BOP080001

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U3 Fire Pump 210 HP Fire Pump

								Annual	al		Flow		Ten	-dı
SON	Facility's	nos	Operation	Signif.	Control	Emission	(3)000	Oper. Hours		VOC	(acfm)	<u>-</u>	(deg F)	<u> </u>
NJID	Designation	Description	Type	Equip.	Device(s)	Point(s)	(6)	Min. Max.		Range 1	Min.	Max.	Min. Max.	Max.
S1	Fire Pump	210 HP Fire Pump Combusting Diesel Fuel	Normal - Steady E10 State	E10		PT10		0.0	500.0		0.869	0.869	598.0 1,076.0 1,076.0	1,076.0

New Jersey Department of Environmental Protection Subject Item Group Inventory

Group NJID: GR1 Facility EM

Members:

Type	a	SO	Step
Ω	UI	OS0 Summary	
n	U 2	OS0 Summary	
n	U3	OS0 Summary	

Formal Reason(s) for Group/Cap: ✓ Other

Other (explain): Facility Totals

Condition/Requirements that will be complied with or are no longer

applicable as a result of this Group:

Operating Circumstances:

Date: 9/25/2009

BAYONNE ENERGY CTR (12863) BOP080001

New Jersey Department of Environmental Protection Reason for Application

Permit Being Modified

Permit Class: Number: 0

Description

Bayonne Energy Center, LLC (BEC) is proposing to construct and operate a dual-fuel of Modifications: simple-cycle electric generating facility in Hudson County, New Jersey. The proposed project, the Bayonne Energy Center (the Project), will be located in Bayonne, New Jersey. The Project will be composed of eight simple-cycle Rolls Royce Trent 60 WLE combustion turbines, each with a nominal output of 64 megawatts (MW), for a total capacity of 512 MW. Natural gas will serve as the primary fuel and ultra low-sulfur distillate (ULSD) oil as back-up fuel should the natural gas supply be interrupted.

> Bayonne, located in Hudson County, New Jersey, is in an area designated as in attainment of the National Ambient Air Quality Standards (NAAQS) and New Jersey Ambient Air Quality Standards (NJAAQS) for carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), particulate matter with a diameter less than 10 microns (PM10) and lead (Pb). Hudson County, along with the rest of New Jersey, is designated as a moderate non-attainment area for the 8-hour ozone (O3) standard. Hudson County and all adjoining northern New Jersey counties are designated as non-attainment under the new particulate matter with a diameter less than 2.5 microns (PM2.5) standard.

> Title 7, Chapter 27, Subchapter 18 of the New Jersey Administrative Code (NJAC) contains the requirements for major new and modified sources. Major source thresholds for regulated pollutants are 25 tons per year (tpy) for volatile organic compounds (VOC) and nitrogen oxides (NOx) and 100 tpy for CO, SO2, PM10, and PM2.5. Based on a 38 to 54 percent annual capacity factor (2,585 hr/yr firing natural gas and 720 hr/yr firing ULSD fuel oil or 4,748 hr/yr firing natural gas only), the Project's emissions of NOx and VOC will exceed 25 tpy, and therefore be subject to Non-attainment New Source Review (NNSR) for NOx and VOC. The other pollutants exceeding the Subchapter 18 significant emissions thresholds are CO, PM10, and PM2.5. Thus, the Project will be subject to Subchapter 18 requirements for NOx, VOC, CO, PM10, and PM2.5. The Project will be below Prevention of Significant Deterioration (PSD) permitting thresholds. The nearest PSD Class I Area is the Brigantine Division of the Edwin B. Forsythe National Wildlife Refuge in southern New Jersey, at an approximate distance of 78 miles from the site.

In addition to the proposed eight gas turbines, major Project equipment will include:

- Selective catalytic reduction (SCR) and oxidation catalyst systems, including auxiliary skids, modules, and stacks;
- Continuous Emissions Monitoring Systems (CEMS);
- Four fin fan coolers;
- One emergency ("black start") generator (1 MW);
- One 210-horsepower fire pump (diesel-fired);
- One 10,000-gallon aqueous ammonia storage tank and skid;
- One on-site fuel oil tank (approximately 250,000 gallons);
- One 760,000-gallon raw water/fire water storage tank;
- One 375,000-gallon demineralized water storage tank;
- An on-site water treatment system; and
- Two electric natural gas compressors.

The primary sources of criteria pollutants associated with the Project are the eight combustion turbines. NOx emissions will be controlled to 2.5 parts per million (ppm) during natural gas firing with the use of SCR and to 5 ppm firing ULSD using water injection and

Date: 9/25/2009

BAYONNE ENERGY CTR (12863) BOP080001

New Jersey Department of Environmental Protection Reason for Application

SCR. CO emissions will be controlled to 5 ppm for both natural gas and oil fired operations using an oxidation catalyst system. VOC emissions will be controlled to 2.5 ppm during natural gas firing and 4.5 ppm firing ULSD using an oxidation catalyst system. Emissions of other criteria pollutants will be controlled through the use of clean fuels (natural gas and ULSD) and good combustion practices. The emergency generator and diesel fire pump will result in a small amount of criteria pollutant emissions during weekly testing. There will also be a minor amount of VOC emissions associated with the on-site fuel oil tank.

BOP080001

New Jersey Department of Environmental Protection

Date: 9/25/2009

Potential to Emit

Subject Item: FC

Operating Scenario:

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.07000000	0.07000000 tons/yr	tons/yr	No
Ammonia			77.95000000	77.95000000 tons/yr	tons/yr	No
00			130.36000000	130.36000000 tons/yr	tons/yr	No
Formaldehyde			8.14000000	8.14000000 tons/yr	tons/yr	No
HAPs (Total)			11.77000000	11.77000000 tons/yr	tons/yr	No
Manganese Emissions			1.22000000	1.22000000 tons/yr	tons/yr	No
NOx (Total)			109.51000000	109.51000000 tons/yr	tons/yr	No
PM-10 (Total)			94.99000000	94.99000000 tons/yr	tons/yr	No
q			0.02200000	0.02200000 tons/yr	tons/yr	No
SO2			23.23000000	23.23000000 tons/yr	tons/yr	No
Sulfuric Acid Mist Emissions			00000016:9	6.97000000 tons/yr	tons/yr	No
rsp			94.99000000	94.99000000 tons/yr	tons/yr	No
VOC (Total)			36.82000000	36.82000000 tons/yr	tons/yr	No

Subject Item: GR1 Facility EM

Operating Scenario:

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions Emissions Before Controls After Controls	Total Emissions	Units	Alt. Em. Limit
00			130.36000000	130.36000000 tons/yr	tons/yr	
NOx (Total)			109.51000000	109.51000000 tons/yr	tons/yr	
PM-10 (Total)			94.99000000	94.99000000 tons/yr	tons/yr	
PM-2.5 (Total)			94.99000000	94.99000000 tons/yr	tons/yr	
802			23.23000000	23.23000000 tons/yr	tons/yr	

Page 1 of 19

BOP080001

New Jersey Department of Environmental Protection

Date: 9/25/2009

Potential to Emit

Subject Item: GR1 Facility EM

Operating Scenario:

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls After Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
SP			94.99000000	94.99000000	tons/yr	
OC (Total)			36.82000000	36.82000000	tons/yr	

Subject Item: IS1

Operating Scenario:

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
VOC (Total)			0.11000000	0.11000000	tons/yr	

Subject Item: U1 8 Turbines

Operating Scenario: OS0 Summary

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.07000000	0.07000000 tons/yr	tons/yr	No
Ammonia			77.95000000	77.95000000 tons/yr	tons/yr	No
03			128.39000000	128.39000000 tons/yr	tons/yr	No
Formaldehyde			8.14000000	8.14000000 tons/yr	tons/yr	No
HAPs (Total)			11.77000000	11.77000000 tons/yr	tons/yr	No
Lead compounds			0.02200000	0.02200000 tons/yr	tons/yr	
Manganese compounds			1.22000000	1.22000000 tons/yr	tons/yr	
NOx (Total)			105.47000000	105.47000000 tons/yr	tons/yr	No

BOP080001

New Jersey Department of Environmental Protection

Date: 9/25/2009

Potential to Emit

Subject Item: U1 8 Turbines

Operating Scenario: OS0 Summary

Step:

Air Contaminant Category	Fugitive	Emissions	Emissions	Total	Units	Alt. Em.
(HAPS)	Emissions	Before Controls	After Controls	Emissions		Limit
PM-10 (Total)			94.96000000	94.96000000 tons/yr	tons/yr	No
PM-2.5 (Total)			94.96000000	94.96000000 tons/yr	tons/yr	
Pb			0.02170000	0.02170000 tons/yr	tons/yr	No
SO2			23.22000000	23.22000000 tons/yr	tons/yr	No
Sulfuric Acid Mist Emissions			00000026.9	6.97000000 tons/yr	tons/yr	No
TSP			94.96000000	94.96000000 tons/yr	tons/yr	No
VOC (Total)			36.68000000	36.68000000 tons/yr	tons/yr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS1 Turb 1 - Gas

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.00400000	0.00400000 lb/hr	lb/hr	No
Ammonia			5.00000000	5.00000000	5.00000000 ppmvd @ 15% O2	
00			5.00000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			00000092.9	6.76000000 lb/hr	lb/hr	No
03			0.01120000	0.01120000	0.01120000 lb/MMBTU	
Formaldehyde			0.43000000	0.43000000 lb/hr	lb/hr	No
HAPs (Total)			0.62000000	0.62000000 lb/hr	lb/hr	No
NOx (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
NOx (Total)			5.55000000	5.55000000 lb/hr	lb/hr	No
NOx (Total)			0.00920000	0.00920000	0.009200000 lb/MMBTU	
PM-10 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	No

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS1 Turb 1 - Gas

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-2.5 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	
802			1.22000000	1.22000000 lb/hr	lb/hr	No
TSP			5.00000000	5.00000000 lb/hr	lb/hr	No
VOC (Total)			2.50000000	2.5000000	2.50000000 ppmvd @ 15% O2	
VOC (Total)			1.93000000	1.93000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS2 Turb 2 - Gas

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.00400000	0.00400000 lb/hr	lb/hr	No
Ammonia			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			5.00000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			00000092.9	6.76000000 lb/hr	lb/hr	No
03			0.01120000	0.01120000 lb/MMBTU	Ib/MMBTU	
Formaldehyde			0.43000000	0.43000000 lb/hr	lb/hr	No
HAPs (Total)			0.62000000	0.62000000 1b/hr	lb/hr	No
Lead compounds			0.0022000	0.00022000 lb/hr	lb/hr	
Manganese compounds			0.29600000	0.29600000 1b/hr	lb/hr	
NOx (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
NOx (Total)			0.00920000	0.00920000	0.00920000 Ib/MMBTU	
NOx (Total)			5.55000000	5.55000000 lb/hr	lb/hr	No
PM-10 (Total)			5.00000000	5.00000000 lb/hr	lb/hr	No

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS2 Turb 2 - Gas

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-2.5 (Total)			5.000000000	5.00000000 1b/hr	lb/hr	
Pb					lb/hr	No
SO2			1.22000000	1.22000000 lb/hr	lb/hr	No
TSP			5.00000000	5.00000000 lb/hr	lb/hr	No
VOC (Total)			2.50000000	2.5000000	2.50000000 ppmvd @ 15% O2	
VOC (Total)			1.93000000	1.93000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS3 Turb 3 - Gas

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.00400000	0.00400000 lb/hr	lb/hr	No
Ammonia			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			00000092.9	6.76000000 lb/hr	lb/hr	No
03			0.01120000	0.01120000 lb/MMBTU	lb/MMBTU	
Formaldehyde			0.43000000	0.43000000 lb/hr	lb/hr	No
HAPs (Total)			0.62000000	0.62000000 lb/hr	lb/hr	No
Lead compounds			0.0022000	0.00022000 1b/hr	lb/hr	
Manganese compounds			0.29600000	0.29600000 1b/hr	lb/hr	
NOx (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
NOx (Total)			0.00920000	0.00920000	0.009200000 Ib/MMBTU	
NOx (Total)			5.55000000	5.55000000 lb/hr	lb/hr	No

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS3 Turb 3 - Gas

Step:

(HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Umts	Alt. Em. Limit
PM-10 (Total)			5.00000000	5.00000000 lb/hr	lb/hr	No
PM-2.5 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	
Pb					lb/hr	No
SO2			1.22000000	1.22000000 lb/hr	lb/hr	No
TSP			5.000000000	5.00000000 lb/hr	lb/hr	No
VOC (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
VOC (Total)			1.93000000	1.93000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS4 Turb 4 - Gas

Air Contaminant Category	Fugitive	Emissions	Emissions	Total	Units	Alt. Em.
(HAPS)	Emissions	Before Controls	After Controls	Emissions		Limit
Acrolein			0.00400000	0.00400000 lb/hr	lb/hr	No
Ammonia			5.00000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			5.00000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			000000929	6.76000000 lb/hr	lb/hr	No
03			0.01120000	0.01120000 Ib/MMBTU	Ib/MMBTU	
Formaldehyde			0.43000000	0.43000000 lb/hr	lb/hr	No
HAPs (Total)			0.62000000	0.62000000 lb/hr	lb/hr	No
Lead compounds			0.00022000	0.00022000 lb/hr	lb/hr	
Manganese compounds			0.29600000	0.29600000 lb/hr	lb/hr	
NOx (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
NOx (Total)			5.55000000	5.55000000 lb/hr	lb/hr	No

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS4 Turb 4 - Gas

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
NOx (Total)			0.00920000	0.00920000	0.00920000 lb/MMBTU	
PM-10 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	No
PM-2.5 (Total)			5.00000000	5.00000000 lb/hr	lb/hr	
Pb					lb/hr	No
802			1.22000000	1.22000000 lb/hr	lb/hr	oN
TSP			5.000000000	5.00000000 lb/hr	lb/hr	oN
VOC (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
VOC (Total)			1.93000000	1.93000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS5 Turb 5 - Gas

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.00400000	0.00400000 lb/hr	lb/hr	No
Ammonia			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			000000929	6.76000000 lb/hr	lb/hr	No
03			0.01120000	0.01120000 lb/MMBTU	Ib/MMBTU	
Formaldehyde			0.43000000	0.43000000 lb/hr	lb/hr	No
HAPs (Total)			0.62000000	0.62000000 lb/hr	lb/hr	No
Lead compounds			0.00022000	0.00022000 lb/hr	lb/hr	
Manganese compounds			0.29600000	0.29600000 lb/hr	lb/hr	
NOx (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS5 Turb 5 - Gas

Step:

Air Contaminant Category	Fugitive	Emissions	Emissions	Total	Units	Alt. Em.
(HAFS)	Emissions	Before Controls	Arter Controls	Emissions		Limit
NOx (Total)			0.00920000	0.00920000 lb/MMBTU	Ib/MMBTU	
NOx (Total)			5.55000000	5.55000000 lb/hr	lb/hr	No
PM-10 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	No
PM-2.5 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	
Pb					lb/hr	No
SO2			1.22000000	1.22000000 lb/hr	lb/hr	No
TSP			5.000000000	5.00000000 lb/hr	lb/hr	No
VOC (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
VOC (Total)			1.93000000	1.9300000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS6 Turb 6 - Gas

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.00400000	0.00400000 lb/hr	1b/hr	No
Ammonia			5.00000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			5.00000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			00000092'9	6.76000000 lb/hr	lb/hr	No
03			0.01120000	0.01120000 Ib/MMBTU	lb/MMBTU	
Formaldehyde			0.43000000	0.43000000 lb/hr	lb/hr	No
HAPs (Total)			0.62000000	0.62000000 lb/hr	lb/hr	No
Lead compounds			0.00022000	0.00022000 lb/hr	lb/hr	
Manganese compounds			0.29600000	0.29600000 1b/hr	lb/hr	

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS6 Turb 6 - Gas

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
NOx (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
NOx (Total)			5.55000000	5.55000000 lb/hr	lb/hr	No
NOx (Total)			0.00920000	0.00920000	0.00920000 Ib/MMBTU	
PM-10 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	No
PM-2.5 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	
90					lb/hr	No
302			1.22000000	1.22000000 lb/hr	lb/hr	No
TSP			5.000000000	5.00000000 lb/hr	lb/hr	No
VOC (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
VOC (Total)			1.93000000	1.93000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS7 Turb 7 - Gas

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Acrolein			0.00400000	0.00400000 lb/hr	lb/hr	No
Ammonia			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
00			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			00000092.9	6.76000000 lb/hr	lb/hr	No
00			0.01120000	0.01120000	0.01120000 lb/MMBTU	
Formaldehyde			0.43000000	0.43000000 lb/hr	lb/hr	No
HAPs (Total)			0.62000000	0.62000000 1b/hr	lb/hr	No
Lead compounds			0.00022000	0.00022000 lb/hr	lb/hr	

Page 9 of 19

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS7 Turb 7 - Gas

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Manganese compounds			0.29600000	0.29600000 lb/hr	lb/hr	
NOx (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
NOx (Total)			0.00920000	0.00920000 1b/MMBTU	lb/MMBTU	
NOx (Total)			5.55000000	5.55000000 lb/hr	lb/hr	No
PM-10 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	No
PM-2.5 (Total)			5.000000000	5.00000000 1b/hr	lb/hr	
qd					lb/hr	No
SO2			1.22000000	1.22000000 lb/hr	lb/hr	No
TSP			5.000000000	5.00000000 lb/hr	lb/hr	No
VOC (Total)			2.50000000	2.50000000	2.50000000 ppmvd @ 15% O2	
VOC (Total)			1.93000000	1.93000000 1b/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS8 Turb 8 - Gas

Step:

Air Contaminant Category	Fugitive	Emissions	Emissions	Total	Units	Alt. Em.
(HAPS)	Emissions	Before Controls	After Controls	Emissions		Limit
Acrolein			0.00400000	0.00400000 lb/hr	lb/hr	No
Ammonia			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			00000092.9	6.76000000 lb/hr	lb/hr	No
03			0.01120000	0.01120000	0.01120000 1b/MMBTU	
Formaldehyde			0.43000000	0.43000000 lb/hr	lb/hr	No
HAPs (Total)			0.62000000	0.62000000 lb/hr	lb/hr	No

Page 10 of 19

BOP080001

New Jersey Department of Environmental Protection

Date: 9/25/2009

Potential to Emit

Subject Item: U1 8 Turbines

Operating Scenario: OS8 Turb 8 - Gas

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
Lead compounds			0.00022000	0.00022000 lb/hr	lb/hr	
Manganese compounds			0.29600000	0.29600000 lb/hr	lb/hr	
NOx (Total)			2.50000000	2.5000000	2.50000000 ppmvd @ 15% O2	
NOx (Total)			5.55000000	5.55000000 lb/hr	lb/hr	oN
NOx (Total)			0.00920000	0.00920000 1b/MMBTU	Ib/MMBTU	
PM-10 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	No
PM-2.5 (Total)			5.000000000	5.00000000 lb/hr	lb/hr	
Pb					lb/hr	oN
802			1.22000000	1.22000000 lb/hr	lb/hr	No
TSP			5.00000000	5.00000000 lb/hr	lb/hr	oN
VOC (Total)			2.50000000	2.5000000	2.50000000 ppmvd @ 15% O2	
VOC (Total)			1.93000000	1.93000000 lb/hr	lb/hr	oN

Subject Item: U1 8 Turbines

Operating Scenario: OS9 Turb 1 - Oil

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Emissions Before Controls After Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
03			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			6.40000000	6.40000000 lb/hr	lb/hr	No
Formaldehyde			0.14000000	0.14000000 lb/hr	lb/hr	No
HAPs (Total)			0.68000000	0.68000000 lb/hr	lb/hr	No
Manganese compounds			0.42500000	0.42500000 1b/hr	lb/hr	
NOx (Total)			0.18000000	0.18000000 lb/MW-hr	lb/MW-hr	

Page 11 of 19

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS9 Turb 1 - Oil

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
NOx (Total)			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
NOx (Total)			10.45000000	10.45000000 lb/hr	1b/hr	No
PM-10 (Total)			15.00000000	15.00000000 lb/hr	lb/hr	No
Pb			0.00750000	0.00750000 lb/hr	lb/hr	No
802			0.80000000	0.80000000 lb/hr	lb/hr	No
TSP			15.00000000	15.00000000 lb/hr	lb/hr	No
VOC (Total)			4.50000000	4.50000000	4.50000000 ppmvd @ 15% O2	
VOC (Total)			3.27000000	3.27000000 lb/hr	1b/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS10 Turb 2 - Oil

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
03			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
00			6.40000000	6.40000000 lb/hr	lb/hr	No
Formaldehyde			0.14000000	0.14000000 lb/hr	lb/hr	No
HAPs (Total)			0.68000000	0.68000000 lb/hr	lb/hr	No
Manganese compounds			0.42500000	0.42500000 lb/hr	lb/hr	
NOx (Total)			0.18000000	0.18000000 lb/MW-hr	lb/MW-hr	
NOx (Total)			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
NOx (Total)			10.45000000	10.45000000 lb/hr	lb/hr	No
PM-10 (Total)			15.00000000	15.00000000 lb/hr	lb/hr	No
Pb			0.00750000	0.00750000 lb/hr	lb/hr	No

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS10 Turb 2 - Oil

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
302			0.80000000	0.80000000 lb/hr	1b/hr	No
LSP CSP			15.00000000	15.00000000 lb/hr	lb/hr	No
VOC (Total)			4.50000000	4.50000000	4.50000000 ppmvd @ 15% O2	
VOC (Total)			3.27000000	3.27000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS11 Turb 3 - Oil

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
03			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
00			6.40000000	6.40000000 lb/hr	lb/hr	No
Formaldehyde			0.14000000	0.14000000 lb/hr	lb/hr	No
HAPs (Total)			0.68000000	0.68000000 lb/hr	lb/hr	No
Manganese compounds			0.42500000	0.42500000 lb/hr	lb/hr	
NOx (Total)			0.18000000	0.18000000 lb/MW-hr	lb/MW-hr	
NOx (Total)			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
NOx (Total)			10.45000000	10.45000000 lb/hr	lb/hr	No
PM-10 (Total)			15.00000000	15.00000000 lb/hr	lb/hr	No
Pb			0.00750000	0.00750000 lb/hr	lb/hr	No
SO2			0.80000000	0.80000000 lb/hr	lb/hr	No
TSP			15.00000000	15.00000000 lb/hr	lb/hr	No
VOC (Total)			4.50000000	4.50000000	4.50000000 ppmvd @ 15% O2	
VOC (Total)			3.27000000	3.27000000 lb/hr	lb/hr	No

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS12 Turb 4 - Oil

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
00			5.000000000	5.00000000	5.000000000 ppmvd @ 15% O2	
00			6.40000000	6.40000000 lb/hr	lb/hr	No
Formaldehyde			0.14000000	0.14000000 lb/hr	lb/hr	No
HAPs (Total)			0.68000000	0.68000000 lb/hr	lb/hr	No
Manganese compounds			0.42500000	0.42500000 lb/hr	lb/hr	
NOx (Total)			0.18000000	0.18000000 lb/MW-hr	lb/MW-hr	
NOx (Total)			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
NOx (Total)			10.45000000	10.45000000 lb/hr	lb/hr	No
PM-10 (Total)			15.00000000	15.00000000 lb/hr	lb/hr	No
Pb			0.00750000	0.00750000 lb/hr	lb/hr	No
SO2			0.80000000	0.80000000 lb/hr	lb/hr	No
TSP			15.00000000	15.00000000 lb/hr	lb/hr	No
VOC (Total)			4.50000000	4.50000000	4.50000000 ppmvd @ 15% O2	
VOC (Total)			3.27000000	3.27000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS13 Turb 5 - Oil

Sten:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
00			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			6.40000000	6.40000000 lb/hr	lb/hr	No
Formaldehyde			0.14000000	0.14000000 lb/hr	lb/hr	No
HAPs (Total)			0.0000089.0	0.68000000 lb/hr	lb/hr	No

BOP080001

New Jersey Department of Environmental Protection Potential to Emit

Date: 9/25/2009

Subject Item: U1 8 Turbines

Operating Scenario: OS13 Turb 5 - Oil

Step:

Air Contaminant Category	Fugitive Fmissions	Emissions Refore Controls	Emissions After Controls	Total	Units	Alt. Em. Limit
Manganese compounds			0.42500000	0.42500000 lb/hr	lb/hr	
VOx (Total)			0.18000000	0.18000000 lb/MW-hr	lb/MW-hr	
VOx (Total)			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
VOx (Total)			10.45000000	10.45000000 lb/hr	lb/hr	No
PM-10 (Total)			15.000000000	15.00000000 lb/hr	lb/hr	No
96			0.00750000	0.00750000 lb/hr	lb/hr	No
302			0.80000000	0.80000000 lb/hr	lb/hr	No
FSP			15.000000000	15.00000000 lb/hr	lb/hr	No
VOC (Total)			4.50000000	4.50000000	4.50000000 ppmvd @ 15% O2	
VOC (Total)			3.27000000	3.27000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS14 Turb 6 - Oil

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
03			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			6.40000000	6.40000000 lb/hr	lb/hr	No
Formaldehyde			0.14000000	0.14000000 lb/hr	lb/hr	No
HAPs (Total)			0.0000089.0	0.68000000 lb/hr	lb/hr	No
Manganese compounds			0.42500000	0.42500000 lb/hr	lb/hr	
NOx (Total)			0.18000000	0.18000000 1b/MW-hr	lb/MW-hr	
NOx (Total)			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
NOx (Total)			10.45000000	10.45000000 lb/hr	lb/hr	No

Page 15 of 19

BOP080001

New Jersey Department of Environmental Protection

Date: 9/25/2009

Potential to Emit

Subject Item: U1 8 Turbines

Operating Scenario: OS14 Turb 6 - Oil

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
PM-10 (Total)			15.000000000	15.00000000 lb/hr	lb/hr	No
9 d			0.00750000	0.00750000 lb/hr	lb/hr	No
SO2			0.80000000	0.80000000 lb/hr	lb/hr	No
TSP			15.00000000	15.00000000 lb/hr	lb/hr	No
VOC (Total)			4.50000000	4.50000000	4.50000000 ppmvd @ 15% O2	
VOC (Total)			3.27000000	3.27000000 lb/hr	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS15 Turb 7 - Oil

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
03			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
03			6.40000000	6.40000000 lb/hr	lb/hr	oN
Formaldehyde			0.14000000	0.14000000 lb/hr	lb/hr	oN
HAPs (Total)			0.68000000	0.68000000 1b/hr	lb/hr	No
Manganese compounds			0.42500000	0.42500000 lb/hr	lb/hr	
NOx (Total)			0.18000000	0.18000000 lb/MW-hr	lb/MW-hr	
NOx (Total)			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
NOx (Total)			10.45000000	10.45000000 lb/hr	lb/hr	No
PM-10 (Total)			15.00000000	15.00000000 lb/hr	lb/hr	oN
Pb			0.00750000	0.00750000 1b/hr	lb/hr	oN
SO2			0.80000000	0.80000000 1b/hr	lb/hr	oN
TSP			15.00000000	15.00000000 lb/hr	lb/hr	oN

BOP080001

New Jersey Department of Environmental Protection

Date: 9/25/2009

Potential to Emit

Subject Item: U1 8 Turbines

Operating Scenario: OS15 Turb 7 - Oil

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions Emissions efore Controls	Total Emissions	Units	Alt. Em. Limit
OC (Total)			4.50000000	4.50000000	1.50000000 ppmvd @ 15% O2	
OC (Total)			3.27000000	3.27000000 1	lb/hr	No

Subject Item: U1 8 Turbines

Operating Scenario: OS16 Turb 8 - Oil

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
00			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
00			6.40000000	6.40000000 lb/hr	lb/hr	No
Formaldehyde			0.14000000	0.14000000 lb/hr	lb/hr	No
HAPs (Total)			0.68000000	0.68000000 lb/hr	lb/hr	No
Manganese compounds			0.42500000	0.42500000 lb/hr	lb/hr	
NOx (Total)			0.18000000	0.18000000 lb/MW-hr	lb/MW-hr	
NOx (Total)			10.45000000	10.45000000 lb/hr	lb/hr	No
NOx (Total)			5.000000000	5.00000000	5.00000000 ppmvd @ 15% O2	
PM-10 (Total)			15.00000000	15.00000000 lb/hr	lb/hr	No
Pb			0.00750000	0.00750000 lb/hr	lb/hr	No
SO2			0.80000000	0.80000000 lb/hr	lb/hr	No
TSP			15.00000000	15.00000000 lb/hr	lb/hr	No
VOC (Total)			4.50000000	4.50000000	4.50000000 ppmvd @ 15% O2	
VOC (Total)			3.27000000	3.27000000 lb/hr	lb/hr	No

BOP080001

New Jersey Department of Environmental Protection

Date: 9/25/2009

Potential to Emit

Subject Item: U2 Em Gen

Operating Scenario: OS0 Summary

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
00			1.92000000	1.92000000 tons/yr	tons/yr	No
NOx (Total)			3.47000000	3.47000000 tons/yr	tons/yr	No
PM-10 (Total)			0.01000000	0.01000000 tons/yr	tons/yr	No
SO2			0.00400000	0.00400000 tons/yr	tons/yr	No
TSP			0.01000000	0.01000000 tons/yr	tons/yr	No
VOC (Total)			0.01000000	0.01000000 tons/yr	tons/yr	No

Subject Item: U2 Em Gen

Operating Scenario: OS1 Em Gen

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
00			7.69000000	7.69000000 lb/hr	lb/hr	No
NOx (Total)			13.90000000	13.90000000 lb/hr	lb/hr	No
PM-10 (Total)			0.06000000	0.06000000 lb/hr	lb/hr	No
PM-2.5 (Total)			0.06000000	0.06000000 lb/hr	lb/hr	
SO2			0.02000000	0.02000000 lb/hr	lb/hr	No
TSP			0.06000000	0.06000000 lb/hr	lb/hr	No
VOC (Total)			0.03000000	0.03000000 lb/hr	lb/hr	No

BOP080001

New Jersey Department of Environmental Protection

Date: 9/25/2009

Potential to Emit

Subject Item: U3 Fire Pump

Operating Scenario: OS0 Summary

Step:

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Before Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
00			0.05000000	0.05000000 tons/yr	tons/yr	No
NOx (Total)			0.57000000	0.57000000 tons/yr	tons/yr	No
PM-10 (Total)			0.02000000	0.02000000 tons/yr	tons/yr	No
SO2			0.00100000	0.00100000 tons/yr	tons/yr	No
TSP			0.02000000	0.02000000 tons/yr	tons/yr	No
VOC (Total)			0.02000000	0.02000000 tons/yr	tons/yr	No

Subject Item: U3 Fire Pump

Operating Scenario: OS1 Fire Pump

Air Contaminant Category (HAPS)	Fugitive Emissions	Emissions Emissions Before Controls After Controls	Emissions After Controls	Total Emissions	Units	Alt. Em. Limit
00			0.19000000	0.19000000 lb/hr	lb/hr	No
NOx (Total)			2.30000000	2.30000000 lb/hr	lb/hr	No
PM-10 (Total)			0.0000000	0.07000000 lb/hr	lb/hr	No
PM-2.5 (Total)			0.00000000	0.07000000 lb/hr	lb/hr	
SO2			0.00300000	0.00300000 lb/hr	lb/hr	No
TSP			0.0000000	0.07000000 lb/hr	lb/hr	No
VOC (Total)			0.0800000	0.08000000 lb/hr	lb/hr	No

12863 BAYONNE ENERGY CTR BOP080001 E1 (Combustion Turbine) Print Date: 6/10/2009

Make:						
Manufacturer:	Rolls Royce					
Model:	Trent 60 WLE					
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		603.00				
Type of Turbine:	Industrial	V				
Type of Cycle:	Simple-Cycle	V	Description:			
Industrial Application:	Electical Gener	ator 🔻	Description:			
Power Output:	64.00		Units:	Megav	vatts	
Is the combustion turbine us	ing (check all th	at apply)):			
A Dry Low NOx Combustor:						
Steam Injection:		Steam	to Fuel Ratio			
Water Injection:	✓	Water t	to Fuel Ratio:			
Other:	✓	Descrip	otion:	SCR a	ind Ox	idatio
Is the turbine Equipped with a Duct Burner?	◯ Yes ● No					
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes No	manuf.'	ou attached a s data or ations to aid its review of tion?	the	● Ye	
Comments:	Turbine 1					

12863 BAYONNE ENERGY CTR BOP080001 E9 (Emergency Generator) Print Date: 6/10/2009

Make:	Caterpillar	(or equivalent)	
Manufacturer:	Caterpillar	(or equivalent)	
Model:			
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		8.50	
Will the equipment be used in excess of 500 hours per year?	Yes No		
Have you attached a diagram showing the location and/or the		Have you attached any manuf.'s data or specifications to aid the	
configuration of this	O Yes	Dept. in its review of this	Yes
equipment?	● No	application?	○ No
Comments:	Emergency	Generator, 1MW	

12863 BAYONNE ENERGY CTR BOP080001 E2 (Combustion Turbine) Print Date: 6/10/2009

Make:						
Manufacturer:	Rolls Royce					
Model:	Trent 60 WLE					
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		603.00				
Type of Turbine:	Industrial	•				
Type of Cycle:	Simple-Cycle	V	Description:			
Industrial Application:	Electical Gener	ator 🔻	Description:			
Power Output:	64.00		Units:	Megav	vatts	
Is the combustion turbine us	ing (check all th	at apply)):			
A Dry Low NOx Combustor:						
Steam Injection:		Steam	to Fuel Ratio	;		
Water Injection:	\checkmark	Water t	to Fuel Ratio:			
Other:	✓	Descrip	otion:	SCR a	nd Ox	idatio
Is the turbine Equipped with a Duct Burner?	Yes No					
Have you attached a diagram showing the location and/or the configuration of this equipment?	● Yes	manuf.'	ou attached a s data or ations to aid its review of tion?	the i	● Ye	
Comments:	Turbine 2					

12863 BAYONNE ENERGY CTR BOP080001 E3 (Combustion Turbine) Print Date: 6/10/2009

Make:						
Manufacturer:	Rolls Royce					
Model:	Trent 60 WLE					
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		603.00				
Type of Turbine:	Industrial	•				
Type of Cycle:	Simple-Cycle	T	Description:			
Industrial Application:	Electical Gener	ator 🔻	Description:			
Power Output:	64.00		Units:	Megav	vatts	
Is the combustion turbine us	ing (check all th	at apply)):			
A Dry Low NOx Combustor:						
Steam Injection:		Steam	to Fuel Ratio	;		
Water Injection:	\checkmark	Water t	to Fuel Ratio:			
Other:	✓	Descrip	otion:	SCR a	nd Ox	idatio
Is the turbine Equipped with a Duct Burner?	◯ Yes ● No					
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes No	manuf.'	ou attached a s data or ations to aid its review of tion?	the i	● Ye	
Comments:	Turbine 3					

12863 BAYONNE ENERGY CTR BOP080001 E4 (Combustion Turbine) Print Date: 6/10/2009

Make:						
Manufacturer:	Rolls Royce					
Model:	Trent 60 WLE					
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		603.00				
Type of Turbine:	Industrial	•				
Type of Cycle:	Simple-Cycle	V	Description:			
Industrial Application:	Electical Gener	ator 🔻	Description:			
Power Output:	64.00		Units:	Megav	vatts	
Is the combustion turbine us	ing (check all th	at apply)):			
A Dry Low NOx Combustor:						
Steam Injection:		Steam	to Fuel Ratio			
Water Injection:	\checkmark	Water t	to Fuel Ratio:			
Other:	✓	Descrip	otion:	SCR a	nd Ox	idatio
Is the turbine Equipped with a Duct Burner?	◯ Yes ● No					
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes No	manuf.'	ou attached a s data or ations to aid its review of tion?	the i	● Ye	
Comments:	Turbine 4					

12863 BAYONNE ENERGY CTR BOP080001 E5 (Combustion Turbine) Print Date: 6/10/2009

Make:						
Manufacturer:	Rolls Royce					
Model:	Trent 60 WLE					
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		603.00				
Type of Turbine:	Industrial	•				
Type of Cycle:	Simple-Cycle	V	Description:			
Industrial Application:	Electical Gener	ator 🔻	Description:			
Power Output:	64.00		Units:	Megav	vatts	
Is the combustion turbine us	ing (check all th	at apply)):			
A Dry Low NOx Combustor:						
Steam Injection:		Steam	to Fuel Ratio			
Water Injection:	✓	Water t	to Fuel Ratio:			
Other:	\checkmark	Descrip	otion:	SCR a	nd Ox	idatio
Is the turbine Equipped with a Duct Burner?	◯ Yes ● No					
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes No	manuf.'	ou attached a s data or ations to aid its review of tion?	the _r	● Ye	-
Comments:	Turbine 5					

12863 BAYONNE ENERGY CTR BOP080001 E6 (Combustion Turbine) Print Date: 6/10/2009

Make:						
Manufacturer:	Rolls Royce					
Model:	Trent 60 WLE					
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		603.00				
Type of Turbine:	Industrial	~				
Type of Cycle:	Simple-Cycle		Description:			
Industrial Application:	Electical Gener	rator 🕶	Description:			
Power Output:	64.00		Units:	Mega	watts	
Is the combustion turbine us	sing (check all th	at apply)):			
A Dry Low NOx Combustor:						
Steam Injection:		Steam	to Fuel Ratio			
Water Injection:	✓	Water t	to Fuel Ratio:			
Other:	\checkmark	Descrip	otion:	SCR a	and Ox	cidatio
Is the turbine Equipped with a Duct Burner?	YesNo					
Have you attached a diagram showing the location and/or the configuration of this equipment?	● Yes	manuf.'	ou attached a s data or ations to aid its review of tion?	the	O Ye	es o
Comments:	Turbine 6					

12863 BAYONNE ENERGY CTR BOP080001 E7 (Combustion Turbine) Print Date: 6/10/2009

Make:						
Manufacturer:	Rolls Royce					
Model:	Trent 60 WLE					
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		603.00				
Type of Turbine:	Industrial					
Type of Cycle:	Simple-Cycle	▼ D	escription:			
Industrial Application:	Electical Gener	rator 🔻 D	escription:			
Power Output:	64.00	U	nits:	Megawa	tts	▼[
Is the combustion turbine us	ing (check all th	at apply):				
A Dry Low NOx Combustor:			,			_
Steam Injection:		Steam to	Fuel Ratio			
Water Injection:	\checkmark	Water to F	Fuel Ratio:			
Other:	✓	Description	n:	SCR and	l Oxid	atio
Is the turbine Equipped with a Duct Burner?	Yes No					
Have you attached a diagram showing the location and/or the configuration of this equipment?	● Yes	manuf.'s d	ons to aid to review of	the _	Yes	
Comments:	Turbine 7					

12863 BAYONNE ENERGY CTR BOP080001 E8 (Combustion Turbine) Print Date: 6/10/2009

Make:						
Manufacturer:	Rolls Royce					
Model:	Trent 60 WLE					
Maximum rated Gross Heat Input (MMBtu/hr-HHV):		603.00				
Type of Turbine:	Industrial	•				
Type of Cycle:	Simple-Cycle	V	Description:			
Industrial Application:	Electical Gener	ator 🔻	Description:			
Power Output:	64.00		Units:	Megav	vatts	
Is the combustion turbine us	ing (check all th	at apply)):			
A Dry Low NOx Combustor:						
Steam Injection:		Steam	to Fuel Ratio	;		
Water Injection:	\checkmark	Water t	to Fuel Ratio:			
Other:	✓	Descrip	otion:	SCR a	nd Ox	idatio
Is the turbine Equipped with a Duct Burner?	◯ Yes ● No					
Have you attached a diagram showing the location and/or the configuration of this equipment?	Yes No	manuf.'	ou attached a s data or ations to aid its review of tion?	the i	● Ye	
Comments:	Turbine 8					

12863 BAYONNE ENERGY CTR BOP080001 E10 (Emergency Generator) Print Date: 6/10/2009

Make:	Clark	
Manufacturer:	John Deere	
Model:	JU6H-UF50	
Maximum rated Gross Heat Input (MMBtu/hr-HHV):	1.50	
Will the equipment be used in excess of 500 hours per year?	YesNo	
Have you attached a diagram showing the location and/or the	Have you attached any manuf.'s data or specifications to aid the	
configuration of this	Yes Dept. in its review of this Yes	
equipment?	No application? No	
Comments:	Fire Pump	

12863 BAYONNE ENERGY CTR BOP080001 CD102 (Selective Catalytic Reduction) Print Date: 6/10/2009

Make:	TBD	
Manufacturer:	TBD	
Model:	TBD	
Minimum Temperature at Catalyst Bed (年):		
Maximum Temperature at Catalyst Bed (F):		
Minimum Temperature at Reagent Injection Point (F):	,	
Maximum Temperature at Reagent Injection Point (年):	,	
Type of Reagent:	Ammonia	
Description:		
Chemical Formula of Reagent:		
Minimum Reagent Charge Rate (gpm):		
Maximum Reagent Charge Rate (gpm)		
Minimum Concentration of Reagent in Solution (% Volume):	,	
Minimum NOx to Reagent Mole Ratio:		
Maximum NOx to Reagent Mole Ratio:		
Maximum Anticipated Ammonia Slip (ppm):	5	
Type of Catalyst:		
Volume of Catalyst (ft³):		
Form of Catalyst:		
Anticipated Life of Catalyst:		
Units:	V	
Have you attached a catalyst replacement schedule?	Yes No	
Method of Determining Breakthrough:		
Maximum Number of Sources Using this Apparatus as a Control Device		
(Include Permitted and Non-Permitted		
Sources):	1	
Alternative Method to Demonstrate Control Apparatus is Operating Properly:		
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?		
	Yes No	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	Yes No	

Comments:

The maximum concentration of ammonia in solution is 19% by weight

12863 BAYONNE ENERGY CTR BOP080001 CD102 (Selective Catalytic Reduction)
Print Date: 6/10/2009

12863 BAYONNE ENERGY CTR BOP080001 CD103 (Oxidizer (Catalytic)) Print Date: 6/10/2009

		_
Make:	TBD	
Manufacturer:	TBD	
Model:	TBD	
Minimum Inlet Temperature (F):		
Maximum Inlet Temperature (욱)		
Minimum Outlet Temperature (℉)		
Maximum Outlet Temperature (%):		
Minimum Residence Time (sec)		
Fuel Type:	<u> </u>	
Description:		
Maximum Rated Gross Heat Input (MMBtu/hr):		
Minimum Pressure Drop Across Catalyst (psi):		
Maximum Pressure Drop Across Catalyst (psi):		
Catalyst Material:		
Form of Catalyst:		
Description:		
Minimum Expected Life of Catalyst:		
Units:		
Volume of Catalyst (ft³):		
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1	
Alternative Method to Demonstrate		
Control Apparatus is Operating Properly:		
Have you attached data from recent performance testing?	Yes No	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	Yes	
Comments:		

12863 BAYONNE ENERGY CTR BOP080001 CD201 (Other)

	Print Date: 6/10/2009
Make:	
Manufacturer:	Rolls Royce
Model:	Trent 60 WLE
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (F):	
Minimum Temperature of Vapor Stream to Control Device (F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	Yes No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
• •	Yes No
Comments:	Water Injection; Part of Turbine Design

12863 BAYONNE ENERGY CTR BOP080001 CD801 (Other)

	Print Date: 6/10/2009
Make:	
Manufacturer:	Rolls Royce
Model:	Trent 60 WLE
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (F):	
Minimum Temperature of Vapor Stream to Control Device (F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	Yes No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
• •	Yes No
Comments:	Water Injection; Part of Turbine Design

12863 BAYONNE ENERGY CTR BOP080001 CD202 (Selective Catalytic Reduction) Print Date: 6/10/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Minimum Temperature at Catalyst Bed (F):	
Maximum Temperature at Catalyst Bed (F):	
Minimum Temperature at Reagent Injection Point (F):	,
Maximum Temperature at Reagent Injection Point (年):	
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm)	
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum NOx to Reagent Mole Ratio:	
Maximum NOx to Reagent Mole Ratio:	
Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	,
Volume of Catalyst (ft³):	
Form of Catalyst:	
Anticipated Life of Catalyst:	
Units:	▼
Have you attached a catalyst replacement schedule?	Yes
Method of Determining Breakthrough:	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	Yes No
Comments:	The maximum concentration of ammonia in solution is 19% by weight

12863 BAYONNE ENERGY CTR BOP080001 CD202 (Selective Catalytic Reduction)
Print Date: 6/10/2009

12863 BAYONNE ENERGY CTR BOP080001 CD203 (Oxidizer (Catalytic)) Print Date: 6/10/2009

Make:	TBD	
Manufacturer:	TBD	Ī
Model:	TBD	Ī
Minimum Inlet Temperature (F):		_
Maximum Inlet Temperature (年)		
Minimum Outlet Temperature (F)		
Maximum Outlet Temperature (욱):		
Minimum Residence Time (sec)		
Fuel Type:	▼	
Description:		
Maximum Rated Gross Heat Input (MMBtu/hr):		
Minimum Pressure Drop Across Catalyst (psi):		
Maximum Pressure Drop Across Catalyst (psi):		
Catalyst Material:		
		_
Form of Catalyst:		
Description:		
Minimum Expected Life of Catalyst:		
Units:		
Volume of Catalyst (ft³):		
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1	
Alternative Method to Demonstrate		_
Control Apparatus is Operating Properly:		
Have you attached data from recent performance testing?	Yes No	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes No No No No No No No	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	Yes No	
Comments:		

12863 BAYONNE ENERGY CTR BOP080001 CD301 (Other) Print Date: 6/10/2009

	Print Date: 6/10/2009
Make:	
Manufacturer:	Rolls Royce
Model:	Trent 60 WLE
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (℉):	
Minimum Temperature of Vapor Stream to Control Device (F):	,
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	Yes No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
control apparatus.	Yes No
Comments:	Water Injection; Part of Turbine Design

12863 BAYONNE ENERGY CTR BOP080001 CD302 (Selective Catalytic Reduction) Print Date: 6/10/2009

Manufacturer: Model: Minimum Temperature at Catalyst Bed (F): Maximum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Minimum Reagent Charge Rate (gpm): Minimum NOx to Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Ox to Reagent Mole Ratio: Maximum Nox to Reagent M	Make:	TBD
Minimum Temperature at Catalyst Bed (F): Maximum Temperature at Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Minimum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Manufacturer:	TBD
Catalyst Bed (F): Maximum Temperature at Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Ox to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Volume of Catalyst: White Individual Control Covice Indicate Permitted and Non-Permitted Sources): Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Model:	TBD
Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Nox to Reagent Mole Ratio: M		
Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No		
Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No		
Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determited and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No Yes No		
Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No	Type of Reagent:	Ammonia
Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm); Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Description:	
Maximum Reagent Charge Rate (gpm); Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Chemical Formula of Reagent:	
Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Nox to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Minimum Reagent Charge Rate (gpm):	
Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No		
Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst (ft³): Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No		
Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst (ft³): Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Minimum NOx to Reagent Mole Ratio:	
Volume of Catalyst (ft³): Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Maximum Anticipated Ammonia	
Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Type of Catalyst:	
Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Volume of Catalyst (ft³):	
Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Form of Catalyst:	
Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Anticipated Life of Catalyst:	
Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Units:	<u></u>
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No		Yes No
this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Method of Determining Breakthrough:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating	1
the location and/or configuration of this	Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Have you attached a diagram showing the location and/or configuration of this	
Comments: Yes No The maximum concentration of ammonia in solut is 19% by weight		The maximum concentration of ammonia in solution

12863 BAYONNE ENERGY CTR BOP080001 CD302 (Selective Catalytic Reduction)
Print Date: 6/10/2009

12863 BAYONNE ENERGY CTR BOP080001 CD303 (Oxidizer (Catalytic)) Print Date: 6/10/2009

Make:	TBD	
Manufacturer:	TBD	
Model:	TBD	
Minimum Inlet Temperature (℉):		
Maximum Inlet Temperature (℉)		
Minimum Outlet Temperature (℉)		
Maximum Outlet Temperature (F):		
Minimum Residence Time (sec)		
Fuel Type:	▼	
Description:		
Maximum Rated Gross Heat Input (MMBtu/hr):		
Minimum Pressure Drop Across Catalyst (psi):		
Maximum Pressure Drop Across Catalyst (psi):		
Catalyst Material:		
Form of Catalyst:	_	
Description:		
Minimum Expected Life of Catalyst:		
Units:	V	
Volume of Catalyst (ft³):		
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1	
Alternative Method to Demonstrate	,	
Control Apparatus is Operating		
Properly:		
Harris and a first to the	<u> </u>	
Have you attached data from recent performance testing?	Yes No	
Have you attached any	<u> </u>	
manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?		
and control apparatus:	Yes No	
Have you attached a diagram showing the location and/or configuration of this control apparatus?		
	Yes No	
Comments:		

12863 BAYONNE ENERGY CTR BOP080001 CD401 (Other) Print Date: 6/10/2009

	Print Date: 6/10/2009
Make:	
Manufacturer:	Rolls Royce
Model:	Trent 60 WLE
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (℉):	
Minimum Temperature of Vapor Stream to Control Device (F):	,
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	Yes No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
control apparatus.	Yes No
Comments:	Water Injection; Part of Turbine Design

12863 BAYONNE ENERGY CTR BOP080001 CD402 (Selective Catalytic Reduction) Print Date: 6/10/2009

Manufacturer: Model: Minimum Temperature at Catalyst Bed (F): Maximum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Minimum Reagent Charge Rate (gpm): Minimum NOx to Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Ox to Reagent Mole Ratio: Maximum Nox to Reagent M	Make:	TBD
Minimum Temperature at Catalyst Bed (F): Maximum Temperature at Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Minimum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Manufacturer:	TBD
Catalyst Bed (F): Maximum Temperature at Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Ox to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Volume of Catalyst: White Individual Control Covice Indicate Permitted and Non-Permitted Sources): Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Model:	TBD
Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Nox to Reagent Mole Ratio: M		
Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No		
Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No		
Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determited and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No Yes No		
Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No	Type of Reagent:	Ammonia
Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm); Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Description:	
Maximum Reagent Charge Rate (gpm); Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Chemical Formula of Reagent:	
Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Nox to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Minimum Reagent Charge Rate (gpm):	
Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No		
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Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst (ft³): Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Minimum NOx to Reagent Mole Ratio:	
Volume of Catalyst (ft³): Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Maximum Anticipated Ammonia	
Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Type of Catalyst:	
Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Volume of Catalyst (ft³):	
Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Form of Catalyst:	
Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Anticipated Life of Catalyst:	
Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Units:	<u></u>
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No		Yes No
this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Method of Determining Breakthrough:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating	1
the location and/or configuration of this	Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Have you attached a diagram showing the location and/or configuration of this	
Comments: Yes No The maximum concentration of ammonia in solut is 19% by weight		The maximum concentration of ammonia in solution

12863 BAYONNE ENERGY CTR BOP080001 CD402 (Selective Catalytic Reduction)
Print Date: 6/10/2009

12863 BAYONNE ENERGY CTR BOP080001 CD403 (Oxidizer (Catalytic)) Print Date: 6/10/2009

Make:	TBD	\neg
Manufacturer:	TBD	$\overline{}$
Model:	TBD	$\overline{}$
Minimum Inlet Temperature (F):		
Maximum Inlet Temperature (年)		
Minimum Outlet Temperature (F)		
Maximum Outlet Temperature (年):		
Minimum Residence Time (sec)		
Fuel Type:	▼	
Description:		
Maximum Rated Gross Heat Input (MMBtu/hr):		
Minimum Pressure Drop Across Catalyst (psi):		
Maximum Pressure Drop Across Catalyst (psi):		
Catalyst Material:		
Form of Catalyst:		
Description:		
Minimum Expected Life of Catalyst:		
Units:		
Volume of Catalyst (ft³):		
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1	
Alternative Method to Demonstrate		_
Control Apparatus is Operating		
Properly:		
Have you attached data from recent performance testing?	Yes No	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes No	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	Yes	
Comments:		

12863 BAYONNE ENERGY CTR BOP080001 CD501 (Other)

	Print Date: 6/10/2009
Make:	
Manufacturer:	Rolls Royce
Model:	Trent 60 WLE
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (F):	
Minimum Temperature of Vapor Stream to Control Device (F):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	Yes No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
• •	Yes No
Comments:	Water Injection; Part of Turbine Design

12863 BAYONNE ENERGY CTR BOP080001 CD502 (Selective Catalytic Reduction) Print Date: 6/10/2009

Manufacturer: Model: Minimum Temperature at Catalyst Bed (F): Maximum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Minimum Reagent Charge Rate (gpm): Minimum NOx to Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Ox to Reagent Mole Ratio: Maximum Nox to Reagent M	Make:	TBD
Minimum Temperature at Catalyst Bed (F): Maximum Temperature at Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Minimum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Manufacturer:	TBD
Catalyst Bed (F): Maximum Temperature at Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Ox to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Volume of Catalyst: White Individual Control Covice Indicate Permitted and Non-Permitted Sources): Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Model:	TBD
Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Nox to Reagent Mole Ratio: M		
Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No		
Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No		
Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determited and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No Yes No		
Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No	Type of Reagent:	Ammonia
Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm); Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Description:	
Maximum Reagent Charge Rate (gpm); Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Chemical Formula of Reagent:	
Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Nox to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Minimum Reagent Charge Rate (gpm):	
Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No		
Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst (ft³): Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No		
Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst (ft³): Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Minimum NOx to Reagent Mole Ratio:	
Volume of Catalyst (ft³): Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Maximum Anticipated Ammonia	
Form of Catalyst: Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Type of Catalyst:	
Anticipated Life of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Volume of Catalyst (ft³):	
Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Form of Catalyst:	
Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Anticipated Life of Catalyst:	
Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No Yes No	Units:	<u></u>
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No		Yes No
this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Method of Determining Breakthrough:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating	1
the location and/or configuration of this	Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Have you attached a diagram showing the location and/or configuration of this	
Comments: Yes No The maximum concentration of ammonia in solut is 19% by weight		The maximum concentration of ammonia in solution

12863 BAYONNE ENERGY CTR BOP080001 CD502 (Selective Catalytic Reduction)
Print Date: 6/10/2009

12863 BAYONNE ENERGY CTR BOP080001 CD503 (Oxidizer (Catalytic)) Print Date: 6/10/2009

		_
Make:	TBD	
Manufacturer:	TBD	
Model:	TBD	
Minimum Inlet Temperature (F):		
Maximum Inlet Temperature (욱)		
Minimum Outlet Temperature (F)		
Maximum Outlet Temperature (F):		
Minimum Residence Time (sec)		
Fuel Type:		
Description:		
Maximum Rated Gross Heat Input (MMBtu/hr):		
Minimum Pressure Drop Across Catalyst (psi):		
Maximum Pressure Drop Across Catalyst (psi):		
Catalyst Material:		
Form of Catalyst:		
Description:		
Minimum Expected Life of Catalyst:		
Units:	▼	
Volume of Catalyst (ft³):		
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1	
Alternative Method to Demonstrate	,	_
Control Apparatus is Operating Properly:		
i iopeny.		
Have you attached data from recent performance testing?	Yes No	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	Yes No	
Comments:		

12863 BAYONNE ENERGY CTR BOP080001 CD601 (Other) Print Date: 6/10/2009

	Print Date: 6/10/2009
Make:	
Manufacturer:	Rolls Royce
Model:	Trent 60 WLE
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (F):	
Minimum Temperature of Vapor Stream to Control Device (下):	
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	Yes No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
	○ Yes ● No
Comments:	Water Injection; Part of Turbine Design

12863 BAYONNE ENERGY CTR BOP080001 CD602 (Selective Catalytic Reduction) Print Date: 6/10/2009

Manufacturer: Model: Minimum Temperature at Catalyst Bed (F): Maximum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Minimum Reagent Charge Rate (gpm): Minimum NOx to Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Ox to Reagent Mole Ratio: Maximum Nox to Reagent M	Make:	TBD
Minimum Temperature at Catalyst Bed (F): Maximum Temperature at Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Minimum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Manufacturer:	TBD
Catalyst Bed (F): Maximum Temperature at Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Ox to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Volume of Catalyst: White Individual Control Covice Indicate Permitted and Non-Permitted Sources): Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No	Model:	TBD
Catalyst Bed (F): Minimum Temperature at Reagent Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum Nox to Reagent Mole Ratio: M		
Injection Point (F): Maximum Temperature at Reagent Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No No		
Injection Point (F): Type of Reagent: Description: Chemical Formula of Reagent: Minimum Reagent Charge Rate (gpm): Maximum Reagent Charge Rate (gpm): Minimum Concentration of Reagent in Solution (% Volume): Minimum NOx to Reagent Mole Ratio: Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm): Type of Catalyst: Volume of Catalyst: Volume of Catalyst: Units: Have you attached a catalyst replacement schedule? Method of Determining Breakthrough: Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources): Alternative Method to Demonstrate Control Apparatus is Operating Properly: Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Yes No		
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the location and/or configuration of this	Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus? Have you attached a diagram showing the location and/or configuration of this	
Comments: Yes No The maximum concentration of ammonia in solut is 19% by weight		The maximum concentration of ammonia in solution

12863 BAYONNE ENERGY CTR BOP080001 CD602 (Selective Catalytic Reduction)
Print Date: 6/10/2009

12863 BAYONNE ENERGY CTR BOP080001 CD603 (Oxidizer (Catalytic)) Print Date: 6/10/2009

Make:	TBD	
Manufacturer:	TBD	
Model:	TBD	
Minimum Inlet Temperature (℉):		
Maximum Inlet Temperature (℉)		
Minimum Outlet Temperature (℉)		
Maximum Outlet Temperature (F):		
Minimum Residence Time (sec)		
Fuel Type:	▼	
Description:		
Maximum Rated Gross Heat Input (MMBtu/hr):		
Minimum Pressure Drop Across Catalyst (psi):		
Maximum Pressure Drop Across Catalyst (psi):		
Catalyst Material:		
Form of Catalyst:	_	
Description:		
Minimum Expected Life of Catalyst:		
Units:	V	
Volume of Catalyst (ft³):		
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1	
Alternative Method to Demonstrate	<u>, </u>	
Control Apparatus is Operating Properly:		
Have you attached data from recent performance testing?	Yes No	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes No	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	Yes No	
Comments:		

12863 BAYONNE ENERGY CTR BOP080001 CD701 (Other) Print Date: 6/10/2009

	Print Date: 6/10/2009
Make:	
Manufacturer:	Rolls Royce
Model:	Trent 60 WLE
Maximum Air Flow Rate to Control Device (acfm):	
Maximum Temperature of Vapor Stream to Control Device (℉):	
Minimum Temperature of Vapor Stream to Control Device (F):	,
Minimum Moisture Content of Vapor Stream to Control Device (%):	
Minimum Pressure Drop Across Control Device (in. H20):	,
Maximum Pressure Drop Across Control Device (in. H20):	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached data from recent performance testing?	Yes No
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	
	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
	Yes No
Comments:	Water Injection; Part of Turbine Design

12863 BAYONNE ENERGY CTR BOP080001 CD702 (Selective Catalytic Reduction) Print Date: 6/10/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Minimum Temperature at Catalyst Bed (F):	
Maximum Temperature at Catalyst Bed (F):	
Minimum Temperature at Reagent Injection Point (F):	
Maximum Temperature at Reagent Injection Point (F):	
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum NOx to Reagent Mole Ratio:	
Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	
Volume of Catalyst (ft³):	
Form of Catalyst:	
Anticipated Life of Catalyst:	
Units:	
Have you attached a catalyst replacement schedule?	Yes No
Method of Determining Breakthrough:	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
Comments:	The maximum concentration of ammonia in solution is 19% by weight

12863 BAYONNE ENERGY CTR BOP080001 CD702 (Selective Catalytic Reduction)
Print Date: 6/10/2009

12863 BAYONNE ENERGY CTR BOP080001 CD703 (Oxidizer (Catalytic)) Print Date: 6/10/2009

Make:	TBD	
Manufacturer:	TBD	Ī
Model:	TBD	Ī
Minimum Inlet Temperature (F):		_
Maximum Inlet Temperature (年)		
Minimum Outlet Temperature (F)		
Maximum Outlet Temperature (욱):		
Minimum Residence Time (sec)		
Fuel Type:	▼	
Description:		
Maximum Rated Gross Heat Input (MMBtu/hr):		
Minimum Pressure Drop Across Catalyst (psi):		
Maximum Pressure Drop Across Catalyst (psi):		
Catalyst Material:		
		_
Form of Catalyst:		
Description:		
Minimum Expected Life of Catalyst:		
Units:		
Volume of Catalyst (ft³):		
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1	
Alternative Method to Demonstrate		_
Control Apparatus is Operating Properly:		
Have you attached data from recent performance testing?	Yes No	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes No No No No No No No	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	Yes No	
Comments:		

12863 BAYONNE ENERGY CTR BOP080001 CD802 (Selective Catalytic Reduction) Print Date: 6/10/2009

Make:	TBD
Manufacturer:	TBD
Model:	TBD
Minimum Temperature at Catalyst Bed (F):	
Maximum Temperature at Catalyst Bed (F):	
Minimum Temperature at Reagent Injection Point (F):	
Maximum Temperature at Reagent Injection Point (F):	
Type of Reagent:	Ammonia
Description:	
Chemical Formula of Reagent:	
Minimum Reagent Charge Rate (gpm):	
Maximum Reagent Charge Rate (gpm):	
Minimum Concentration of Reagent in Solution (% Volume):	
Minimum NOx to Reagent Mole Ratio:	
Maximum NOx to Reagent Mole Ratio: Maximum Anticipated Ammonia Slip (ppm):	5
Type of Catalyst:	
Volume of Catalyst (ft³):	
Form of Catalyst:	
Anticipated Life of Catalyst:	
Units:	
Have you attached a catalyst replacement schedule?	Yes No
Method of Determining Breakthrough:	
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1
Alternative Method to Demonstrate Control Apparatus is Operating Properly:	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes No
Have you attached a diagram showing the location and/or configuration of this control apparatus?	
Comments:	The maximum concentration of ammonia in solution is 19% by weight

12863 BAYONNE ENERGY CTR BOP080001 CD802 (Selective Catalytic Reduction)
Print Date: 6/10/2009

12863 BAYONNE ENERGY CTR BOP080001 CD803 (Oxidizer (Catalytic)) Print Date: 6/10/2009

Make:	TBD	
Manufacturer:	TBD	
Model:	TBD	
Minimum Inlet Temperature (°F):		
Maximum Inlet Temperature (年)		
Minimum Outlet Temperature (F)		
Maximum Outlet Temperature (F):		
Minimum Residence Time (sec)		
Fuel Type:	▼	
Description:		
Maximum Rated Gross Heat Input (MMBtu/hr):		
Minimum Pressure Drop Across Catalyst (psi):		
Maximum Pressure Drop Across Catalyst (psi):		
Catalyst Material:		
Form of Catalyst:	<u> </u>	
Description:		
Minimum Expected Life of Catalyst:		
Units:	▼	
Volume of Catalyst (ft³):		
Maximum Number of Sources Using this Apparatus as a Control Device (Include Permitted and Non-Permitted Sources):	1	
Alternative Method to Demonstrate	<u>, </u>	
Control Apparatus is Operating Properly:		
Have you attached data from recent performance testing?	Yes No	
Have you attached any manufacturer's data or specifications in support of the feasibility and/or effectiveness of this control apparatus?	Yes No	
Have you attached a diagram showing the location and/or configuration of this control apparatus?	✓ Yes ♠ No	
Commonts	Yes No	
Comments:		



Jon S. Corzine *Governor*

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mark N. Mauriello Acting Commissioner

Division of Air Quality Bureau of Operating Permits 401 E. State Street, 2nd floor, P.O. Box 27 Trenton, NJ 08625-0027

PHASE II ACID RAIN PERMIT

Issued to: Bayonne Energy Center

401 Hook Road, Bayonne, NJ 070002

Owned by: Bayonne Energy Center, LLC

c/o Pure Energy Resources, LLC

25 Mall Road, Suite 404 Burlington, MA 01803

Operated by: Bayonne Energy Center, LLC

c/o Pure Energy Resources, LLC

25 Mall Road, Suite 404 Burlington, MA 01803

ORIS Code: 56964

Effective: September 24, 2009

This Acid Rain Permit is issued under the authority of Chapter 106, P.L.1967 (N.J.S.A. 26:2C-9.2) and Titles IV and V of the Clean Air Act. The owners and operators of each affected unit at this facility shall comply with all of the requirements established in this permit.

Approved by:

John Preczewski, P.E Assistant Director,

Air Quality Permitting Element

ACID RAIN PERMIT CONTENTS

- 1) STATEMENT OF BASIS
- 2) UNIT SPECIFIC REQUIREMENTS
- 3) COMMENTS, NOTES, AND JUSTIFICATIONS REGARDING PERMIT DECISIONS
- 4) PHASE II PERMIT APPLICATION

1) Statement of Basis

In accordance with N.J.S.A. 26:2C-9.2 and Titles IV and V of the Clean Air Act, the Department issues this permit pursuant to N.J.A.C. 7:27 et seq.

2) Unit Specific Requirements

Refer to 40 CFR 72 for specific requirements.

3) Comments, Notes, And Justifications Regarding Permit Decisions

This facility is subject to the Operating Permit regulations promulgated at N.J.A.C. 7:27-22. Therefore, the facility must obtain an Operating Permit. The Department is currently reviewing the Operating Permit application filed by the applicant, and expects to issue a permit decision on their application in the near future. The procedures for incorporating this Acid Rain permit into the Operating Permit shall be consistent with the state requirements at N.J.A.C. 7:27-22.29, the federal requirements at 40 CFR 72, and any official guidance issued by USEPA.

4) Phase II Permit Application

The owners and operators shall comply with all of the standard requirements and special provisions set forth on the attached Phase II Permit Application for each affected unit.



Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: √ new ~ revised ~ for Acid Rain permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

Bayonne Energy Center	New Jersey	Plant Code 56964

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

	_
а	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
GT1	Yes
GT2	Yes
GT3	Yes
GT4	Yes
GT5	Yes
GT6	Yes
GT7	Yes
GT8	Yes

Bayonne Energy Center	

Permit Requirements

STEP 3

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

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Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to

the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program

does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.

(2) The owners and operators of an affected source that has excess

emissions in any calendar year shall:

(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and

(ii) Comply with the terms of an approved offset plan, as required by 40

CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

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Bayonne Energy Center			

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
- (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Bayonne Energy Center	
Dayonne Energy Center	

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

STEP 3, Cont'd.

- (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law:
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

STEP 4
Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Paul Barnett, Managing Director, PER	Energy, agent for BEC	
Signature	Date5-5-09	



State of New Jersey

Jon S. Corzine
Governor

Department of Environmental Protection
Division of Water Supply - Water Supply Permitting Element
Bureau of Water Systems and Well Permitting
401 E. State Street - P.O. Box 426
Trenton, New Jersey 08625-0426
Tel #: (609) 984-6831 - Fax #: (609) 633-1495
http://www.state.ni.us/dep/watersupply/

Mark Mauriello
Acting Commissioner

October 22, 2009

Bayonne Municipal Utilities Authority 630 Avenue C Bayonne, NJ 07002

Dear Water Purveyor:

Enclosed is a simplified water main extension permit dated October 22, 2009 issued to you pursuant to the New Jersey Safe Drinking Water Act, N.J.S.A. 58:12A, and in consideration of your application dated July 17, 2009 and signed by Stephen J. Gallo, Executive Director.

Your permit is for:

- ◆ Construction of 250 L.F. of 10 inch DIP water transmission main to serve Bayonne Energy Center, a proposed energy efficient gas fired 512 MW electric generation facility; located in Bayonne City (401 Hook Road, Block # 482, Lot # 9), County of Hudson, New Jersey; and
- The distribution of water for potable purposes from said works.

Your attention is directed to both the **specific and general conditions** on aforesaid permit, **particularly No. 6**. Enclosed with this permit is the Construction Completion Certification (CCC). The CCC **must** be submitted as required by the Submittal Action Requirements in the attached permit conditions. If the facility is not completed within the specified time allotment, an "Extension of Time" may be requested so long as the permit is still valid. No extension of time can be granted to an expired permit. Should you have any questions about this permit, please contact Xenia Feliz at (609) 984-6831. When contacting the Department regarding this permit, please reference the Permit No. and PWSID No. provided herein.

Sincerely.

Steven-Fudney, C.Eng. MICE

Acting Section Chief, SDWA Permits – North Bureau of Water Systems and Well Permitting

PWSID NO.: NJ0901001 WCP090002

Enclosures

cc: John S. Roiak, P.E., Hatch Mott MacDonald

Mayor and Council of Bayonne City

Northern Bureau of Water Compliance and Enforcement

Xenia Feliz, BWSWP



State of New Jersey

Jon S. Corzine Governor

Department of Environmental Protection Division of Water Supply - Water Supply Permitting Element Burcau of Water Systems and Well Permitting 401 E. State Street - P.O. Box 426 Trenton, New Jersey 08625-0426 Tel #: (609) 984-6831 - Fax #: (609) 633-1495 http://www.state.nj.us/dep/watersupply/

Mark Mauriello Actine Commissioner

PERMIT*

The New Jersey Department of Environmental Protection grants this permit in accordance with your application. attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Permit No. WCP090002	Issuance Date	Effective Date	Expiration Date
PWSID No. 0901001	October 22, 2009	Issuance Date	See General Condition No. 17
Name and Address of Applicant		Location of Activity/Facility:	
		401 Hook Road	
Bayonne Municipal Utilities Authority		Block # 482, Lot # 9	
630 Avenue C	•	Bayonne City, Hu	dson County
Bayonne, NJ 07002		Type of Permit	Statute(s):
		Potable Water Su	pply N.J.S.A. 58:12A-1.1 et seq.

This permit grants permission to:

- Construct 250 L.F. of 10 inch DIP water transmission main to serve Bayonne Energy Center, a proposed energy efficient gas fired 512 MW electric generation facility:
- 2. Operate the facilities approved by this permit and distribute water for potable purposes from said works.

According to Simplified Water Main Extension Certification Form:

Dated July 16, 2009, prepared by Hatch Mott MacDonald, received July 20, 2009;

According to an Engineer's Report and Specification entitled:

Bayonne Energy Center

Prepared By

07/01/2009

Hatch Mott MacDonald

According to Plans entitled:

Pure Energy Resources Development

Bayonne Energy Center

Date

08/11/2009

Prepared By

Revised 10/09/2009

Worley Parsons

Additional information: 07/23/2009, 08/14/2009, 09/24/2009 and 10/20/2009

This permit is subject to specific and general conditions contained in the following page(s):

Continued on Requirements Page -- 1 of 2

Approved by the authority of:

Mark N. Maurielo

Acting Commissioner

Steven Pudney, Acting Section Chief

The word permit means approval, certification, registration, etc.

BAYONNE MUA 0901001

SDW Construction Permit: WCP090002

Permit Requirements

Submittal/Action Requirements

Applicable Subject Items	Submittal/Action Type	Requirement
WCP090002, WME to serve Bayonne Encrgy Center (WSYT902428)	Completed construction certification report	Within thirty days of completion of the approved facilities the permittee/engineer shall notify the Department of the completion date and certify that the facilities were constructed in accordance with the approved plans and specifications by returning the enclosed Construction Completion Certification. Submission shall not be later than the expiry date of this permit. [N.J.A.C. 7:10-11]

Text Requirements

All Phases

WCP090002, WME to serve Bayonne Energy Center (WSYT902428)

- 1. DISTRIBUTION SYSTEM PERMIT SPECIFIC CONDITIONS.
- 2. The permittee is advised that the peak daily demand associated with this approval is 1.6 MGD. [N.J.A.C. 7:10-11]
- 3. The permittee is advised that the projected peak daily demand for this water supply is 11.36 MGD versus a current Firm Capacity of 12.6 MGD, [N.J.A.C. 7:10-11]
- 4. The permittee is advised that the total water available the bulk purchase agreement with New Jersey District Water Supply Commission (NJDWSC) is 390.60 MGM (based on 120% monthly overdraft provision from NJDWSC) and 3,832.50 MGY. With this approval and previously approved water main extensions, the projected peak monthly and annual demands are 319 MGM and 3,309 MGY, [N.J.A.C. 7:10-11]
- 5. This permit shall not be construed as an approval for any other future development(s) or service connections to be served by this water main extension. Separate permit applications are necessary for these development(s). [N.J.A.C. 7:10-11]
- 6. The permittee is advised that the approved water mains shall not be placed in service until such time the rehabilitation of the Bayonne Aqueduct (approved under Permit No. WCP090001) is completed. [N.J.A.C. 7:10-11]
- PERMIT GENERAL CONDITIONS.
- 8. The permit is revocable, or subject to modification or change, at any time, when in the judgment of the New Jersey Department of Environmental Protection such revocation, modification or change shall be necessary. [N.J.A.C. 7:10-11]
- 9. The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:10-11]
- 10. The works, facilities and/or activities shown by plans and/or other engineering data, which are this day approved, subject to the conditions herewith established, shall be constructed and/or executed in conformity with such plans and/or engineering data and said conditions. [N.J.A.C. 7:10-11]
- 11. No change in plans or specifications shall be made without prior written permission from the New Jersey Department of Environmental Protection. [N.J.A.C. 7:10-11]
- 12. The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:10-11]
- 13. This permit does not waive the obtaining of Federal or other State or Local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:10-11]
- 14. A copy of this permit shall be kept at the work site, and shall be exhibited upon request of any person. [N.J.A.C. 7:10-11]

BAYONNE MUA 0901001

SDW Construction Permit: WCP090002

Text Requirements

All Phases

WCP090002, WME to serve Bayonne Energy Center (WSYT902428)

- In the examination of plans and/or other engineering data, the New Jersey Department of Environmental Protection does not examine the structural features of the design, such as thickness of concrete or its reinforcement, the efficiency of any electrical or mechanical equipment or apparatus, and the approval herewith given does not include these features. [N.J.A.C. 7:10-11]
- 16. Water distribution by said works shall at all times meet the applicable standards for quality. Additional units for the derivation, treatment and for distribution of the water shall be established if and when required by the New Jersey Department of Environmental Protection. [N.J.A.C. 7:10-11]
- 17. For this permit to remain valid, the facilities approved in this permit shall be constructed and placed into service within three years from the effective date of the permit. [N.J.A.C. 7:10-11]
- 18. The operations of the public water facility shall be under the supervision of an operator or operators who shall possess a valid license or licenses issued by the New Jersey Department of Environmental Protection, pursuant to the provisions of the Water Supply and Wastewater Operators' Licensing Act, N.J.S.A. 58:11-64 et seq.
- 19. The minimum required licensing classification shall be W-4 or equivalent and in accordance with the Licensing of Water Supply and Wastewater Treatment System Operators, N.J.A.C. 7:10A-1.1 et seq., and the supplements thereof and amended thereto. [N.J.A.C. 7:10-11]
- 20. The public water facilities shall be operated in such a manner so as to be in full compliance with the New Jersey Safe Drinking Water Act Rules at N.J.A.C. 7:10-1.1 et seq. and the Water Supply Management Act Rules at N.J.A.C. 7:19-1.1 et seq. [N.J.A.C. 7:10-11]
- 21. The public water facilities shall be operated in such a manner as to optimize the use of all available sources of water in order to achieve and maintain compliance with water purchase contract from NJDWSC. [N.J.A.C. 7:10-11]



Jon S. Corzine Governor Department of Environmental Protection
Division of Water Supply - Water Supply Permitting Element
Bureau of Water Systems and Well Permitting
401 E. State Street - P.O. Box 426
Trenton, New Jersey 08625-0426
Tel #: (609) 984-6831 - Fax #: (609) 633-1495
http://www.state.nj.us/dep/watersupply/

Mark Mauriello Acting Commissioner

CONSTRUCTION COMPLETION CERTIFICATION

Attention:

Bureau of Water Systems and Well Permitting

Water Systems Construction Permit Section

PERMIT NO.: WCP090002

ISSUANCE DATE: October 22, 2009

I (We) hereby certify that the following has been built and placed into service* and was completed in accordance with the approved plans, specifications, and other supporting information.

APPLICANT: Bayonne Municipal Utilities Authority

PWSID: NJ0901001

PROJECT DESCRIPTION: 250 L.F. of 10 inch DIP water transmission main to serve Bayonne

Energy Center, a proposed energy efficient gas fired 512 MW electric generation facility

MUNICIPALITY: Bayonne City

COUNTY: Hudson

COMPLETION DATE:

OUR ELITOR DATE.	111000
DATE FACILITIES WERE PLACED INTO SERVICE *:	

Signature of Engineer & Embossed Seal

Name of Engineer / New Jersey License Number

Date

^{*} Placed into service means that the water mains or other permitted infrastructure changes are actually delivering water to all consumers approved by the permit, except to the extent that the remaining number of realty improvements not being served is below the threshold for needing a permit, i.e. less than 15 realty improvements or 6,000 GPD of non-residential demand.



State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO Lt. Governor DEPARTMENT OF ENVIRONMENTAL PROTECTION Municipal Finance and Construction Element Division of Water Quality P.O. Box 425 Trenton, New Jersey 08625 Fax: (609) 633-8165

www.state.nj.us/dep/dwg

BOB MARTIN Acting Commissioner

Bayonne MUA 610 Ave. C Bayonne, NJ 07002

MAR 17 203

Re: Treatment Works Approval No. 10-0039 Hook Rd. P.S. Bayonne City, Hudson County

Gentlemen:

There is enclosed a Treatment Works Approval issued to you pursuant to Title 58 of the Revised Statutes of New Jersey and in consideration of your application received on 01/25/2010 signed by Stephen Gallo, Exec. Dir., and John Rolak, P.E.

This approval is valid for a period of two (2) years from the issuance date, unless otherwise stated in the attached approval document. This approval shall expire unless building, installing or modifying of the treatment works has begun within the initial approval period. Treatment works approvals may be extended beyond the original two year approval date, to a maximum period of five years from the original issuance date, in accordance with the terms and conditions contained in N.J.A.C. 7:14A-22.12. A time extension request must be received by the Department prior to the permit's expiration date. Time extension requests shall be submitted to the Bureau of Financing and Construction Permits at the address noted in the heading of this letter.

If you have any questions regarding the permit, please contact Sharad Pandya of this office by calling (609) 292-5563.

Sincerely,

James Pontoriero, Supervising Engineer

Bureau of Financing and Construction Permits

10-0039

Enclosure

CC;

Passaic Valley Sewerage Commissioners

John S. Rolak, Jr., P.E., Hatch, Mott, MacDonald



STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION P.O. Box 402, TRENTON, NJ 08625-0402

PERMIT TO CONSTRUCT AND OPERATE* TREATMENT WORKS

*Local Agency approval required prior to operation

The New Jersey Department of Environmental Protection grants this approval in accordance with your application, attachments accompanying same application, and applicable laws and regulation.

PERMIT NO.

ISSUANCE DATE

EXPIRATION DATE

DESIGN FLOW

10-0039

03/18/2010

03/17/2012

.15 M.G.D.

NAME AND ADDRESS OF APPLICANT

Bayonne MUA 610 Ave. C Bayonne NJ 07002 LOCATION OF ACTIVITY

Bayonne City Hudson County

This permit grants permission to:

Construct and operate new gravity sewers, force main and pumping station, Hook Road Pump Station, to serve new Bayonne Energy Company (BEC) along with existing customers on Hook Road, to handle conveyance of wastewater generated due to further purification of MUA's potable water for its electrical power generation process use i.e. RO (reverse osmosis process), located at 401 Hook Road in City of Bayonne, Hudson County, New Jersey.

According to the plans entitled:

Bayonne Municipal Utilities Authority, Hudson County, New Jersey, New Hook Road Sewage Pumping Station. Set of drawings containing 15 sheets submitted, dated December 2009, unrevised, prepared by Hatch Mott MacDonald.

and according to the specifications entitled:

Bayonne Municipal Utilities Authority, City of Bayonne, Hudson County, New Jersey, New Hook Road Sewage Pumping Station, dated December 2009, unrevised, prepared by Hatch Mott MacDonald.

Prepared by

-Sharad Pandya

APPROVED by the Department of Environmental Protection

Shadab Ahmad, P.H., Section Chil

Gautam R. Patel, Chief

Bureau of Financing and Construction Permits

Gartam Pfatel

This permit is also subject to special provisos and general conditions stipulated on the attached pages which are agreed to by the permittee upon acceptance of the permit.

PASSAIC VALLEY SEWERAGE COMM, Newark

TWA No. 10-0039 TWA100001 Stage 2 & 3 Treatment Works Approval, Approved

PART I

PROVISOS

A. Project Specific Provisos

- 1. That pursuant to N.J.A.C. 7:10A-1 et. seq., an appropriate public wastewater collection system licensed operator will be required for your system.
- 2. That all sewerage conveyance facilities which are to be abandoned shall be emptied of wastes and either removed or abandoned in place in a manner which is acceptable to the administrative authority.
- 3. That no unpermitted discharge of raw sewage and/or untreated wastewater is to occur as a result of the construction approved herein.
- 4. That except as provided in N.J.A.C., 7:14A-22.4, any future sewer connections into the sanitary sewer system approved herein will require a treatment works approval from the N.J.D.E.P.
- 5. That for the purposes of design flow, the design capacity of the pump station approved herein is considered to be 412 gallons per minute with the largest pump out of service.
- 6. That the owner and/or applicant shall be responsible for ensuring that operational and/or odor problems do not occur at the pump station and force main during the initial stages of development when low sewage flows will be generated.

B. Custom Requirement

1. It is the applicant's responsibility to obtain all Federal, State and local approvals that may be required for this project.

03:23:51 p.m.

10-0039

Part II

GENERAL CONDITIONS FOR TREATMENT WORKS APPROVALS

Section A. GENERAL CONDITIONS

- This permit is revocable, or subject to modification or change, at any time, when in the judgement of the Department of Environmental Protection of the State of New Jersey such revocation, modification or change shall be necessary.
- 2. The issuance of this permit shall not be deemed to affect in any way action by the Department of Environmental Protection of the State of New Jersey on any future application.
- The works, facilities, and/or activities shown by plans and/or other engineering data, which are this day approved, subject to the conditions herewith established, shall be constructed and/or executed in conformity with such plans and/or engineering data and the said conditions.
- No change in plans or specifications shall be made except with the prior written permission of the Department of Environmental Protection of the State of New Jersey.
- 5. The granting of this permit shall not be construed to in any way affect the title or ownership of property, and shall not make the Department of Environmental Protection or the State a party in any suit or question of property.
- This permit does not waive the obtaining of Federal or other State or local government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained.
- A copy of this permit shall be kept at the work site, and shall be exhibited upon request of any person.
- No treatment unit or conveyance system may be by-passed which would result in the discharge of untreated sewage into any of the waters of the state.
- The full responsibility for adequate design, construction and operation of the treatment works, and the full responsibility for successful collection, treatment, and discharge of pollutants shall be on the applicant.
- 10. The issuance of approval by the Department shall not relieve the applicant of the continuing responsibility for the successful collection, treatment, or discharge of pollutants for the continuing compliance with any applicable effluent limitations, permits, regulations, statute, or other law.
- 11. Review and approval is based solely upon the information contained in the application and the contents of the engineer's report as certified by the licensed professional engineer as being in compliance with the Department's Rules and Regulations.

10-0039 Part II

Section B. CONSTRUCTION COMPLETION CERTIFICATION

- Within 30 days of completion of the treatment works approved herein, the permittee shall submit two executed forms, WQM005 Certification of Approval, to the appropriate sewage treatment plant (STP) for their approval prior to operation. One executed copy approved by the receiving STP shall be forwarded to the appropriate Bureau and address noted on the cover page of this approval. Failure to submit the certification within 30 days of completion of the project may be grounds for revocation of the permit. Should partial operation be required prior to completion, approval will be under local jurisdiction.
- 2. In cases where the project and the receiving treatment facility are one in the same, the WQM005 Certification of Approval form must be submitted to the Bureau and address noted on the cover page of this approval within 30 days of completion of the treatment works. Failure to submit the certification within this time period may be grounds for revocation of the permit.

Section C. PERMIT EXPIRATION AND EXTENSIONS OF TIME

- This permit shall remain in force for a period of only two years from the date of approval unless stated
 otherwise within the special provisos, or construction of said works has begun within the approved
 time frame. Interruption of construction of said works for a period of more than two years may serve
 as a basis for permit revocation.
- 2. Treatment works approvals may be extended beyond the original two year approval date, to a maximum of five years from the original issuance date, in accordance with the terms and conditions in N.J.A.C. 7:14A-22.12, unless stated otherwise within the special provisos. A time extension request must be received by the Department prior to the permit's expiration date. Requests must be submitted to the Bureau and address noted on the cover page.

Section D. ADJUDICATORY HEARING REQUESTS

Pursuant to N.J.A.C. 7:1C-1.9 et seq., any interested person who considers himself or herself
aggrieved by this action, may, within 10 days of publication of notice of the decision in the DEP
Bulletin, request a hearing by addressing a written request for such hearing to the:

Office of Legal Affairs
Attention: Adjudicatory Hearing Requests
Department of Environmental Protection
P.O. Box 402
Trenton, NJ 08625-0402

Such a request should include a completed Administrative Hearing Request Checklist and Tracking form for Approvals or Denials (enclosed herein for Denials). This form is required, as DEP is the transmitting agency to the Office of Administrative Law, pursuant to N.J.A.C. 1:1-8.2.



City of Bayonne

DIVISION OF PLANNING & ZONING

MUNICIPAL BUILDING

630 AVENUE °C BAYONNE, NJ 07002

TEL. 201-858-6182 FAX 201-858-6185

E-MAIL: lglazewski@baynj.org



April 27, 2009

Stephen E. Barcan, Esq. Wilentz Goldman & Spitzer, PA 90 Woodbridge Center Drive Suite 900 PO Box 10 Woodbridge, NJ 07095-0958

Re: P-09-002 - Bayonne Energy Center, LLC

401 Hook Road Block 482, Lot 9

Dear Mr. Barcan:

Enclosed please find a copy of the resolution memorializing the Planning Board's decision in connection with the above-referenced application. As you know, the resolution was adopted at the special meeting held on April 23, 2009. The Board's decision will be published in the Jersey Journal on Friday, May 1, 2009.

Please be aware that building permits cannot be issued until all of the conditions listed on Schedule A of the resolution are satisfied.

Should you have any questions or concerns please do not hesitate to contact me.

Very truly yours,

Lillian Glazewski

Land Use Administrator

/lg

Enclosure(s)

cc: Robert F. Sloan, Clerk

Richard N. Campisano, Esq., Board Counsel

Michael Feuer, Construction Official

John Zgola, Zoning Officer

Raymond Sniegos, Fire Sub-Code Official Donald P. Schlachter, P.E., City Engineer

John Fussa, P.P., City Planner

RESOLUTION
PLANNING BOARD
CITY OF BAYONNE

APPLICANT:

BAYONNE ENERGY CENTER, LLC

APPLICATION NO.:

P-09-002

PREMISES:

401 Hook Road Block 482, Lot 9

WHEREAS, BAYONNE ENERGY CENTER, LLC ("BEC"), has applied to the Planning Board of the City of Bayonne for Preliminary and Final Major Site Plan approval and variances to construct an electrical power production and transmission facility on property located at 401 Hook Road in City Block 482, Lot 9; and

WHEREAS, the applicant, through its attorneys, Wilentz, Goldman & Spitzer, P.A. (Stephen E. Barcan, Esq., appearing), came before the Board at a special meeting held on April 23, 2009; and

WHEREAS, the applicant submitted evidence that it has made the application in conformity with the City's Zoning Ordinance and that it has complied with all procedural requirements of the Zoning Ordinance, including the giving of notice and the payment of fees; and

WHEREAS, Paul Barnett of Pure Energy Resources, LLC; Scott Dawson, P.E.; Charles Harman, Environmental Consultant; Fred Sellars, Air Permitting Consultant, Elizabeth Dolan, P.E.,

traffic engineer; and Michael Theriault, Acoustical Consultant, presented testimony in support of the application; and

WHEREAS, after carefully considering the evidence, proofs and testimony of the applicant presented at the hearing in this matter, the Board made the following findings of fact and conclusions of law:

- The Planning Board has jurisdiction to act upon this application; and
- 2. The subject site is an existing 10.72 acre tract in the I-H Zone; it was formerly occupied by the Grand Corrugated Container Corporation and is adjacent to a Hess Corporation petroleum storage facility. Hess Corporation is one of the members of the applicant.
- 3. The proposed use is a 512KW electric power production and transmission facility. It will allow electrical interconnection to New York City by a new cable under the Kill Van Kull and New York Harbor to a ConEdison facility in Brooklyn. The cable will start at the bulkhead on the subject site. The facility will be powered by natural gas delivered by a new connection to an existing Hess-owned off-site pipeline which will be recertified to transport natural gas. Natural gas will be backed up by ultra low sulfur diesel fuel to be provided by a direct pipeline from an adjacent storage facility.
- Paul Barnett testified that he is a principal with 4. Pure Energy Resources, LLC ("PER"). PER is the project developer for BEC. BEC is jointly owned by Hess Corporation (Hess) and an affiliate of ArcLight (ArcLight). PER Partners, LLC, experience developing projects such as this and Mr. Barnett gave his background in that regard. described a number benefits the of Mr. Barnett project will provide to the City:
 - (i) the project is a tax ratable, producing approximately \$50,000,000 in taxes over the useful life of the project;

- the facility will purchase process water from the Bayonne Municipal Utility Authority (BMUA) which presently has surplus water; this could be as much as \$25,000,000 in revenue over the life of the project;
- (iii) the project will pay wastewater discharge fees; this could mean as much as \$10,000,000 in income to the BMUA over time;
- (iv) there will be about three hundred (300) construction jobs at peak and a total of one thousand (1000) over the approximately eighteen (18) month construction period and then ten (10) highly-skilled operations related permanent jobs;
- (v) BEC will be a technology education center
 for teachers and students;
- Mr. Barnett explained why this is a particularly good 5. site for the use. It has appropriate zoning, as confirmed by the City's Zoning Officer in his letter of October 23, 2008. It has direct waterfront access for the new cable; and, roads and the necessary Construction of an overland utilities all exist. cable would face issues such as diverse property ownership, BEC's lack of eminent domain power, and disruption of public streets. The site is near the aforementioned Hess pipeline which is inactive, maintained, and can be modified and recertified to transport natural gas; and, gas is a clean fuel. site is far from residences and other sensitive noise receptors; this distance also provides a visual buffer. a Brownfields site Finally, reutilized as a productive site and traffic can access the site through existing industrial roads.
- 6. Mr. Barnett stated that the plant would be staffed 24 hours per day, 7 days per week; however, the turbines would run approximately 40% of the time based on long term market forecasts. Therefore it would be primarily a daytime operation, Monday thru Friday from 6 am to 10 pm.
- 7. Mr. Barnett stated that BEC's consultants reviewed the permits which would be required and are presently seeking the needed outside agency approvals -- an air

permit from NJDEP for emissions; a waterfront development permit from NJDEP; Federal permits under the Clean Air Act and the Clean Water Act; approval of New York City; the Hudson County Planning Board; and the Passaic Valley Sewerage Commission. Further testimony on that was later provided by the applicant's environmental consultants, Charles Harman and Fred Sellars.

- 8. Mr. Barnett explained how the facility will enhance the reliability of the region's electricity grid and so help to meet increasing demand throughout the region. This is to be done with the clean technology which he and other witnesses described, with no discernable noise impact and limited visual impact.
- Applicant's engineer is Scott Dawson, P.E. While not 9. licensed in New Jersey, Mr. Dawson is a licensed engineer and the submitted plans were sealed by a licensed New Jersey engineer as required. The Board accepts Mr. Dawson as qualified to give testimony as a professional engineer. He is a 1999 graduate of Lehigh University and received his Professional His company -- Worley Engineer license in 2008. Parsons -- is an international firm specializing in power plant site planning, design and construction. Mr. Dawson is employed at the firm's Reading, Pa. Mr. Dawson reviewed exhibits showing the office. area around the site and the site-- as stated above it is in the I-H Zone, 10.72 acres, and all the buildings are razed except for remaining foundations which will be removed when appropriate under an existing demolition permit. The impervious surface will be reduced with this project.
- 10. The site is bounded by Hook Road to the north; the Kill Van Kull to the south; Hess storage tanks to the west; and, to the east, a part of the IMTT facility.
- 11. The nearest Bayonne residence is over one mile away.
- 12. Mr. Dawson first explained site access and parking vehicles enter via an access easement to Hook Road and then park in one of the eleven conforming spaces.
- 13. Mr. Dawson reviewed the layout of equipment and facilities used in the process of producing electric power -- these include storage tanks for aqueous

ammonia which is a reactant in the emissions control process; containment areas for the transformer and oil-water separator; and storage areas for hazardous materials. All tanks have containment or are double-walled. There is space dedicated for a back up fuel tank if one is installed in the future.

- 14. Mr. Dawson addressed stormwater management, landscaping and lighting, and project infrastructure (water, sewer and gas). As to stormwater management, it is noted that the existing level of impervious coverage will be reduced. Consequently, there will be improvement (reduction) in the amount of runoff which flows overland into catch basins and goes to the Kill Van Kull.
- 15. Mr. Dawson addressed the two variances. The first is that an acoustical barrier (wall) of varying heights must be 15 to 30 feet high in order to be effective; a wall twelve feet high is allowed by Zoning Ordinance Section 35-4.14.C.1.
- 16. Mr. Dawson also discussed the second variance needed -- a variance from N.J.S.A. 40:55D-35 and Ordinance Section 35-4.8 requiring that a building lot abut a public street providing access. Here, the access will be provided by an twenty- (20) foot wide road on an existing easement over adjacent land to Hook Road. It is adequate for emergency vehicles and so under N.J.S.A. 40:55D-36 the requirement directly to abut a street can be waived. There would be undue hardship without such relief. The prior user also accessed the site through this private easement.
- given by Charles Testimony was also 17. environmental consultant. Mr. Harman has a Bachelor a Master of Science Science in Ecology, Ecology, and twenty years of experience as consultant preparing environmental assessments and in resource statements environmental impact management and environmental permitting. He has been with AMEC, an environmental consulting firm, for over For this project he has been the nine (9) years. preparation consultant for the Environmental Impact Statement ("EIS") required by environmental permitting for and City the (particularly for the Waterfront Development Permit).

- 18. Mr. Harman testified that site remediation is complete -- a report is now being prepared for NJDEP with a request for remediation close-out, with permanent monitoring, and an industrial use deed restriction.
- 19. The EIS filed in this matter followed the City of Bayonne's format so as to evaluate the potential impact of construction and operation of the facility. It explained the best management techniques of mitigating potential impacts in various categories and evaluated the compatibility of the site for the use in terms of things like existing site conditions, zoning and nearby land uses. Potential impacts were also evaluated -- on surface water quality, visual, in terms of flood plain disruption, and on air quality. All of these meet applicable requirements.
- 20. Mr. Harman used a number of photographs of views from a local new golf course and other nearby places showing the low visual impact.
- 21. The EIS and Mr. Harman's testimony continued with a discussion of environmental performance controls and mitigation on subjects such as noise by an acoustical wall and silencers and acoustical enclosures on the equipment; lighting (for which all applicable codes will be met and cutoff fixtures will be used); and, air emissions, by using very efficient combustion turbines, clean-burning gas and the most advanced emissions control technology available. All federal, state, and local permits will be obtained where required.
- 22. Frederick Sellars testified on air quality issues and the permitting process. He holds a Bachelor of Science in Natural Resources and has over 30 years experience in air quality impact assessment and permitting, the last twenty-five (25) focused on power plant licensing. He has been responsible for the successful licensing of over 15,000 megawatts of new power plant projects nationwide, and has given expert testimony in many states.
- 23. Mr. Sellars' assignment in this matter was to oversee the air quality impact analyses and permit applications. The air permits to be obtained for this project are required under the Federal Clean Air

Act and the New Jersey Department of Environmental Protection's (NJDEP) Preconstruction and Operating Permit programs. The applicable state and federal regulations require application of State-ofthe-Art emissions controls, a demonstration that the project's emissions represent the Lowest Achievable purchase "offsets," of Rate, and Emission reductions in emissions from other existing sources. Sellars testified that emissions from this plant will be considerably lower than from existing New Jersey power plants; further, this plant will displace the operation of older, less efficient facilities when it is operating because the cost to run will be lower and it will be "cleaner".

- 24. Mr. Sellars testified that the U.S. Environmental Protection Agency (USEPA) and NJDEP have established ambient air quality standards for the protection of public health and welfare. Air quality impacts from the project's emissions have been estimated through a modeling analysis approved by the NJDEP which has concluded that project impacts will be below the "Significant Impact Levels" (SILs) established by USEPA and NJDEP. In addition, there will be no discernable odor from the project.
- 25. The permits needed include a Preconstruction Permit and Title V Operating Permit from the NJDEP and a Title IV Acid Rain permit from the USEPA.
- Applicant next presented the testimony of Elizabeth 26. Dolan, traffic engineer. She prepared a report dated September 29, 2008 which was filed with the Board. That report reviewed existing roadways and nearby traffic conditions including volumes, intersections and nearby uses; estimated trip generation from the project; and analyzed future intersection driveway capacities with the traffic to be generated by the project. It was noted that due to the industrial nature of the area, nearby roads (New Hook Road, Avenue J and East 22nd Street particularly) Across the site carry heavy vehicles regularly. frontage, the two-way volumes on Hook Road are approximately 220 vehicles in the morning peak hour and 250 vehicles during evening peak with heavy vehicles representing 16% and 24%, respectively, of Levels of service at peak hours are such volumes. LOS "B" or better; with 10 employees projected, only

- low volumes will be generated-- specifically eight (8) peak hour trips. Acceptable levels of service will remain. There will be more of an impact during construction -- cars carrying construction workers can be accommodated within existing roadway capacity and truck activity delivering construction materials will not introduce anything new -- there is significant truck traffic already on nearby streets and the construction traffic will be spread throughout.
- 27. Applicant next presented its acoustical consultant, Michael Theriault. He holds a BS in Electrical Engineering with a concentration in Acoustics. He has spent his entire career (since 1986) in the field of acoustics; he has extensive experience in designing noise control solutions and preparing noise impact assessments for power plants, having worked on over one hundred (100) such facilities. He has also given extensive testimony in many states, for both governmental and private clients.
- 28. Mr. Theriault's assignment in this matter was to verify noise code compliance -- 50 dBA at night at the nearest homes and 65 dBA at the site's industrial boundaries. He was also asked to evaluate whether -- regardless of code compliance -- the project had the potential to be bothersome acoustically to residents in Bayonne.
- 29. Mr. Theriault first presented existing (ambient) noise levels at the nearest homes which are 1 mile away. The plant will be inaudible at these homes, even during times of lowest ambient levels. This conclusion was based on measurements of present (ambient) noise and estimates of noise generation by BEC using a computer model. The conservative assumption in the model was that all 8 turbines were running at once, each producing maximum power.
- 30. Mr. Theriault confirmed that plant noise at the homes will be below code limits. This is due not only to the large distance from the BEC facility to the homes, but also because of the numerous noise control features and of the plant, including mufflers on the engine air intakes, enclosures for the gas compressors, slower-turning fans on the air coolers, and a low noise main transformer.

- 31. However, noise generated at the site boundaries will exceed state and local noise limits of 65 dBA; 80 dBA will occur. Even though this will happen within the industrial area and the noise would not be heard beyond that, a sound mitigation wall is proposed which varies in height from fifteen (15) to thirty (30) feet in order to be effective. It is noted that fence height -- but not building height -- is limited to only 12 feet by the Zoning Ordinance.
- 32. Mr. Theriault testified that the tall wall was needed because the lot is long and narrow which requires the equipment producing noise to be within fifty (50) to one hundred (100) feet of the property line. If the lot were more rectangular and the equipment could be placed further from the site perimeter a sound wall may not be required. Since some of the equipment is twenty-five (25) feet high a similarly sized wall is needed to block sound at the property line.
- Mr. Theriault also explained that the applicant 33. requests that construction of the wall be delayed can be taken measurements until noise commissioning of the plant so the height, length and precise placement of the wall can be determined. its effectiveness maximized. can be way Mr. Theriault stated that the Applicant is committed to installing the wall within six (6) months after receiving a permanent certificate of occupancy. During the six (6) month construction of the sound wall noise levels will be OSHA-compliant.
- 34. Mr. Theriault added that the project was also evaluated in terms of compliance with noise codes applicable to residents of Staten Island and found to be compliant. Mr. Theriault also considered impact on the Bayonne Harbor residential complex which is not yet completed and on the Golf Club; noise levels will be in compliance at both locations.
- 35. Finally, construction noise was also evaluated and, for the most part, found to be below ambient noise levels.
- 36. The project is conforming with the City's Zoning Ordinance and other applicable regulations, except for (i) the height of the noise wall and (ii) lack of direct access to an abutting public road. As to the

noise wall, the applicant noted the lot's long, narrow shape as severely limiting the ability to locate the equipment far from the property line. to the access, the applicant will utilize an easement over the adjacent parcel used by the prior user, and of course the fact that there is no abutting street These facts all provide "undue cannot be changed. hardship" under N.J.S.A. 40:55D-70.c.1. In addition, the variances enable use of the site for this permitted use and enable compliance with applicable noise codes which is a benefit to the community, Finally, there is no outweighing any detriment. limit to building height, and the wall is well within industrial areas where its height will likely not be objectionable, again indicating that there is no detriment and that the requirements of N.J.S.A. 40:55D-70.c.2. are met.

- 37. Accordingly, the Board finds that based upon the record before it that the variances sought by the applicant will not substantially impair the intent and purpose of the Zoning Ordinance of the City of Bayonne or be substantially detrimental to the public good. The variances are needed to develop the property as proposed for this permitted use; they will not have a detrimental impact on the overall use and enjoyment of neighboring properties.
- 38. The Board hereby determines that the applicant has satisfied all requirements for site plan approval and has met its burden of proof to the satisfaction of the Planning Board for the requested bulk variances, and for the variance under N.J.S.A. 40:55D-35 and 36 as to road access.

BE IT THEREFORE RESOLVED that the Planning Board of the City of Bayonne hereby GRANTS Bayonne Energy Center, LLC, a bulk variance for height of the sound wall, a variance under the ordinance and N.J.S.A. 40:55D-35 and 36 as to road access, and Preliminary and Final Major Site Plan Approval to construct the proposed electric power production and transmission facility on property located at 401 Hook Road in the City on Block 482,

Lot 9, subject to the approval of all pertinent Federal, State, County and Municipal rules and regulations, statutes, codes and ordinances and other conditions listed on Schedule "A" attached hereto.

BE IT FURTHER RESOLVED that the Planning Board grants Applicant's request to defer the request for a sound wall for up to six (6) months following issuance of a permanent Certificate of Occupancy.

BE IT FURTHER RESOLVED that the Chairman of the Planning Board has hereby authorized his signature to this Resolution granting site plan approval with variances and the Land Use Administrator is authorized to advertise the action taken by way of Resolution in a local newspaper; and

BE IT FURTHER RESOLVED that the Land Use Administrator is authorized to send copies of this Resolution to the following City Officials: City Clerk, Construction Official, Zoning Officer, Fire Sub-Code Official, City Planner and City Consulting Engineer.

SCHEDULE "A" BAYONNE ENERGY CENTER, LLC

- (a) The applicant shall comply with the reports and 1. recommendations of the City Engineer dated April 20, 2009, City Planner dated April 21, 2009, Construction Monkowski, 30, 2009, James March dated Official Environmental Health Specialist dated April 6, Environmental Commission dated April 2, 2009, Subcode Official dated April 1, 2009, and John S. Rolak, Jr., P.E., dated March 10, 2009, attached hereto and made a part hereof, except as those recommendations have been specifically modified as reflected in the minutes of the proceedings before the Board on this application; and
 - (b) The following is noted on the City Planner's Report (i) as to his Planning Comment #5 and proposed Condition "K" applicability of the New Jersey Statewide Non-Residential Development Fee requirement will be governed by applicable State law; (ii) as to Planning Comment #6 and proposed Condition "L" any public waterfront access is under NJDEP jurisdiction but constitutes a prior approval for release to the building department. (iii) as to the waiver for street trees and proposed Condition "E", applicant will pay into a fund for planting off-site to address the waiver at the standard City rate (per tree).
- 2. The applicant shall maintain the property specifically including all landscaping and parking in accordance with the approved plan; and
- 3. Revised plans containing all conditions shall be submitted for final approval by the City's Planner and Engineer; and
- 4. The applicant shall establish and maintain an Escrow Account with the City of Bayonne to pay for the professional review and inspection fees related to this application and construction required in conjunction therewith; and
- 5. The applicant shall submit cost estimates to the City Engineer to determine the cost of the Performance Bond and Inspection Escrow fees; and

- 6. Approval of this application is further conditioned on full compliance with all applicable Federal, State and Local Ordinances, rules and regulations and all required permits and approvals and certificates; and
- 7. Approval of this application is further conditioned upon the payment of all taxes, fees and required escrow deposits to the City of Bayonne. The applicant shall pay any additional fees or escrow deposits which may be due and owing within 30 days from the date of the adoption of this resolution; and
- 8. All documents required to be prepared by the applicant by virtue of the terms or provisions of any condition set forth in this resolution shall, before execution, be submitted to and approved by the Board Attorney and Engineer; and
- 9. If any other governmental agency grants a waiver or variance of a regulation, then this Board shall have the right to review that issue as it relates to this approval granted by this Board and modify to amend same; and
- 10. The applicant shall start the construction in accordance with the plans as approved and herewith submitted, within twenty-four months from the date of publication of the legal notice to the Board's decision in this application.
- 11. The applicant shall prepare a health, safety and construction plan for the City of Bayonne's approval prior to the issuance of any permits by the City.

RECORDED VOTE:

Commissioners	<u>Aye</u>	Nay	<u>Abstain</u>	Not Voting	Not Present
Garelick LaPelusa Lotosky Roberts Gallo Birtwistle O'Donnell Pineiro Mayor Smith Joseph Tagliareni Acting Commissioner	[] [X] [X] [X] [X] [X] [X] [X]			[] [] [] [] []	[X] [] [] [] [] [] [] [X] []
WHEREAS, the applica	ation ha	ving rec	eived8	/ 	votes is hereby
✓ APPROVE	D	DE	NIED		

The above Resolution was adopted By the Planning Board of the City of Bayonne at a special meeting held on April 23, 2009.

GREGORY ROBERTS

Chairman

Dated: April 23, 2009



City of Bayonne

Department of Community Development / Division of Planning & Zoning

630 Avenue C, Bayonne N.J. 07002 P: (201) 858-6075, F: (201) 858-6185

Honorable Mark Smith Mayor

John D. Fussa, P.P. City Planner

Exhibit - A-18

Bayonne Energy Center P-09-002

(04-23-09lg)

TO:

City of Bayonne Planning Board

FROM:

John Fussa, P.P; City Planner

RE:

Planning Board #P-09-002;

Application of Bayonne Energy Center, L.L.C.;

P/F Major Site Plan, Bulk Variance and Design Waiver;

Block 482, Lot 9; 401 New Hook Road

DATE:

April 21, 2009



Technical Review Committee

The applicant has appeared before the Technical Review Committee (TRC) twice to discuss their development proposal for a waterfront power generation facility with the most recent meeting occurring on October 21, 2008. The TRC found the proposed use to be consistent with the heavy industrial zoning for the site and confirmed the requirement for major site plan approval as well as bulk variance and design waiver relief. The TRC also identified a number of issues to be addressed including coordination with State agencies involved in the permitting process, infrastructure improvements necessary to serve the facility, operational characteristics, site access and traffic generation, the potential for nuisance impacts, mitigation of impacts and host community benefits. The submitted plans are substantially similar to those reviewed by the TRC.

Project Description

The subject application is for a proposed power generation facility to be developed by the applicant on property owned by the Hess Corporation that is located at 401 New Hook Road in the Constable Hook section of the City as shown on page four (4). The property has historically been used for industry and it is currently vacant with 290-feet of frontage on the Kill Van Kull. The proposed project may be summarized as follows:

- Use: The proposed use is heavy industrial in nature and will involve the generation of electricity for the New York City market. The power generation facility will utilize 8 turbines that are natural gas fired with a fuel oil back-up supply.
- Structures/Buildings: The proposed development incorporates a number of industrial structures and buildings including the 8 power generating turbines, 8 vent stacks that are 151-feet high, one (1) primary transformer, multiple storage tanks and a multi-use building for offices, storage and water treatment.
- Site Plan: The proposed site plan accommodates the multiple structures and buildings referenced above and also incorporates access via New Hook Road, 11 off-street parking spaces, a loop road for circulation through the site, noise attenuating sounds walls, perimeter security fencing, site lighting and utilities.

Approvals, Variances and Waivers Required

The subject property is located within the I-H Heavy Industrial District and the proposed power generation facility is a permitted use in the District. The proposed project requires preliminary and final major site plan approval as well as the following relief:

- 1. Section 33-10.17: The City zoning ordinance requires all development proposals to incorporate landscaping and street trees in the site plan. The proposed site plan incorporates landscaping but lacks street trees. This is a design waiver.
- 2. Section 35-4.14c(1): The City zoning ordinance requires a maximum height of 12-feet for fences and walls in industrial districts. The proposed site plan incorporates a noise attenuating sound wall that is up to 30-feet high in places. This is a bulk variance.
- 3. Section 35-5.17e(2): The City zoning ordinance requires a minimum lot frontage of 125-feet. The proposed site plan is accessible by an access easement and lacks frontage upon a public street or right-of-way. This is a bulk variance.

Planning Comments

- 1. The applicant should discuss the purpose of the proposed power generation facility and provide the Board with information about the existing site conditions, required infrastructure improvements, phasing of development, how the facility will operate, business hours, customers in the New York City market, employment levels and required environmental permits. The applicant shall also provide the Board with information about the company, their experience in developing power generation facilities, the existence of similar facilities in the region, etc.....
- 2. The applicant shall address the required bulk variances and design waivers for nonconforming wall height, lack of frontage and absence of street trees. The applicant must address the positive and negative criteria including the basis for the site plan design, benefits (special reasons) of the design and potential impacts if any. From a planning perspective, I have no objection to the variances and waivers because of their limited impact subject to the following:
 - A. Wall Height: The wall height of up to 30-feet is necessary to provide sound attenuation and to mitigate the noise impacts of the proposed use. The site plan should be revised to clarify the height of each wall segment in relationship to sensitive receptors such as the nearby Bayonne Golf Club.
 - B. Frontage: The lack of frontage is an existing condition and has little impact upon adjacent properties because the site is accessible by an existing easement that connects to New Hook Road.
 - C. Street Trees: The design waiver for lack of street trees can be mitigated or eliminated by the planting of the required street trees off-site at a location approved to the City.
- 3. The applicant shall address the potential environmental impacts associated with the proposed power generation facility including turbine emissions, volume of noise, visual impact of the stacks, storage of hazardous materials (ammonia), discharge of process water and use of fuel oil. The applicant must summarize the status of approvals and permits with the N.J. Department of Environmental Protection (NJDEP), U.S. Army Corps of Engineers, Bayonne Municipal Utilities Authority (BMUA) and other agencies with jurisdiction over the project. The applicant shall summarize the submitted environmental impact statement and address the comments of the City Environmental Specialist in his letter of April 6, 2009.

The Board may wish to reserve the right to have the applicant extend the sound walls if noise becomes a major issue once the power generation facility is constructed and in operation.

- 4. The applicant shall address the potential trip generation and traffic impact of the proposed power generation facility upon New Hook Road during construction and when in operation. The applicant shall clarify the vehicular trips generated during the peak hours and on a daily basis; the level of service impact on New Hook Road and the potential for conflicts at the rail grade crossing in the access easement to the site. Other issues to be addressed include construction traffic, transport of materials and equipment to the site and any traffic impacts associated with repair work to the natural gas line that will serve the facility.
- 5. The proposed power generating station is subject to the N.J. Statewide Non-Residential Development Fee requirement as amended and modified by State law and COAH regulations. The Board is advised that Senate Bill S-2484, which would provide an 18-month moratorium on the 2.5 percent development fee, has passed the

To: Bayonne Planning Board

Re: #P-09-002, Bayonne Energy Center, L.L.C.

State Senate but still requires action by the State Assembly and Governor's Office.

6. The applicant and their partner the Hess Corporation have an obligation through the NJDEP to provide for public waterfront access in connection with the required waterfront development permit. The applicant and Hess have indicated that they would like to make a substantial contribution towards an off-site waterfront access project elsewhere in the City to satisfy this requirement. The Board is advised that we have been working with the attorney(s) for the applicant and Hess on an appropriate contribution that would fund such a project subject to NJDEP approval.

The State's guidance has been to base the contribution upon the required Hudson River Waterfront Walkway Design Standards over the 290+/- linear feet of frontage upon the Kill Van Kull. Similar projects have been done in recent years on an order of magnitude basis of \$1,300 per linear foot (Boatworks) to \$1,820 per linear foot (Peninsula at Bayonne Harbor).

- 7. The applicant shall address the comments of the City Engineer, BMUA, City Environmental Specialist and other agencies with jurisdiction.
- 8. I recommend the following conditions and plan revisions if the Board approves the proposed project:
 - A. Revise the plans in accordance with the professional reports, Board conditions and modifications agreed to or imposed at public hearing.
 - B. Provide copies of all other required governmental approvals including from the City Engineer, BMUA, NJDEP, Army Corps of Engineers, Hudson County Planning Board, Hudson-Essex-Passaic Soil Conservation District, etc.... prior to release to the Building Department.
 - D. Provide a phasing and staging plan for the construction phase in connection with the required preconstruction meeting(s).
 - E. Mitigate or eliminate the design waiver for lack of street trees by planting the required trees in a City approved location off-site or donating the required trees to the City for planting elsewhere in the community.
 - F. Correct the Site Entrance Area Plan to call-out the rail crossing pavement marking on westbound New Hook Road at the approach to the site driveway.
 - G. Provide a manufacturer's cut-sheet, sample materials board and color scheme for the perimeter sound wall for review and approval.
 - H. Provide the proposed signage plan(s) for review and approval in accordance with the City sign ordinance.
 - Maintain a positive balance in the project escrow account and provide the required performance bond with inspection escrow prior to application for building permits.
 - J. Provide a complete set of as-built plans upon the completion of site development.
 - K. Comply with the N.J. Statewide Non-Residential Development Fee requirement <u>as amended and modified</u> <u>at the time of issuance of building permits</u>.
 - L. Enter into the required Memorandum of Agreement with the City and NJDEP on the contribution to an offsite waterfront access project elsewhere in the City prior to release to the Building Department.

I will be present at the public hearing to address any questions about the proposed project or this planning report.

/jf

Cc: Lillian Glazewski; City Land Use Administrator
Don Schlachter, P.E.; City Engineer
Richard Campisano, Esq.; Board Attorney
John Zgola; City Zoning Officer
Steve Gallo/John Rolak, P.E.; BMUA
James Monkowski; City Environmental Specialist
Neil Collins; Bayonne Energy Center, L.L.C.
Donna Jennings, Esq.; Attorney for Applicant

Project Site – Bayonne Energy Center





City of Bayonne

DIVISION OF ENGINEERING

MUNICIPAL BUILDING

630 AVENUE C BAYONNE NJ 07002

> TEL 201-858-7182 FAX 201-858-6185



MEMORANDUM

TO: Bayonne Planning Board

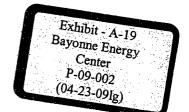
CC: John Fussa, PP, City Planner

Lillian Glazewski, Land Use Administrator

FROM: Don Schlachter, City Engineer

DATE: 20 APR 09

RE: Bayonne Energy Center P 09-002



401 Hook Road - - - Block 482 Lot 9

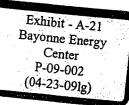
The referenced application is for the construction of an electrical generation facility on a currently vacant lot adjoining Hook Road in the Heavy Industrial District. The project scope includes the construction of eight natural gas combustion turbines and associated facilities buildings, parking, and process chemical storage.

The only variance/waiver noted on the drawings and in the application is the height of the sound wall that exceeds the 12-foot maximum allowed in City Code Section 35-4.14c.

The documents reviewed include:

- Application dated 26 JAN 09:
- Applicant's narrative statement:
- Deeds of various on-site easements;
- Tax Status Certification dated 26 JAN 09;
- Zoning Report dated 23 OCT 08;
- Report of Hatch Mott MacDonald dated 10 MAR 09;
- Site plans prepared by WorleyParsons consisting of 13 sheets with various revision dates consisting of:
 - BECP-1-DW-111-101-001 C 31 MAR 09 "Cover Sheet"
 - BECP-1-DW-111-101-002 B 31 MAR 09 "Tax Maps"
 - BECP-1-DW-111-002-101 G 10 MAR 09 "Site Plan"
 - BECP-1-DW-111-002-102 B 07 APR 09 "Site Entrance Area"
 - BECP-1-DW-111-002-103A 09 MAR 09 "Railroad Sign and Pavement Marking Details"
 - BECP-1-DW-111-002-151 F 31 MAR 09 "Zoning Information"
 - o BECP-1-DW-024-735-001 C 12 MAR 09 "Grading and Drainage Plan"
 - o BECP-1-DW-024-735-002 C 12 MAR 09 "Surfacing, Fencing, and Landscaping Plan"
 - BECP-1-DW-024-735-003 C 12 MAR 09 "Site Drainage Schedules and Typical Details"
 - o BECP-1-DW-686-220-001 C 11 MAR 09 "Lighting Study"

CITY OF BAYONNE SITE PLAN REFERRAL AND REQUEST FOR RECOMMENDATION



[] Donald Schlachter, P.E. City Engineer	DATE: March 27, 2009
<pre>[} Raymond Sniegos Fire Sub-Code Official</pre>	Application Number P-09-002
James Monkowski Environmental Spec./ Program Coordinator	NAME OF APPLICANT:
[] John D.Fussa P.P. City Planner	Bayonne Energy Center, LLC
[] Michael J. Feuer Construction Official	401 Hook Road
[] Stephen Gallo, Bayonne MUA, Director	Block 482, Lot 9
[] Robert Zawistowski Bayonne Environmental Comm	
REPRESENTED BY: The [X] Planning Board [] Board of Adjustment	<u>Donna M. Jennings, Esq.</u>
	ation and site plan for consideration.
The Board has placed the matter on its age We would appreciate your comment by: COMMENTS: (Use separate sheet if its separate sheet)	Thursday April 9 2000
Date:	gency:

- BECP-1-SK-101-002-001 C 07 APR 09 "Architectural Layout, Admin/water Treatment Building, North and South Elevations"
- BECP-1-SK-101-002-002 C 07 APR 09 "Architectural Layout, Admin/Water Treatment Building Plan and Elevations".
- Survey of Block 482 Lot 9 prepared by GEOD Corporation dated 19 JUL 07, last revised 14 MAY 08;
- Storm Water Management Report prepared by WorleyParsons dated 27 JUN 08, last revised 11 MAR 09; and,
- Environmental Impact Statement prepared by AMEC Earth & Environmental dated DEC 08.

After review of the referenced documents and an inspection of the site and surroundings, I offer the comments set forth below.

GENERAL

- 1. The project's location on the waterfront makes it subject to a number of regulatory agencies likely including:
 - Corps of Engineers
 - > NJ Dept. of Environmental Protection
 - i. Air Quality
 - ii. Water Quality
 - iii. Waterfront Development
 - iv. ISRA
 - New York Article 7 (cables)

The applicant must provide testimony regarding the status of any outside agency approvals, and any approval by the Board must be subject to the obtaining of those approvals.

TRAFFIC

 The traffic study element of the Environmental Impact Statement concludes minimal impact of the project during operation but a larger impact during construction. Testimony should be provided regarding any measures being taken during construction to minimize those impacts.

STORMWATER/SEWER

 The discharge of drainage from the site is into the Kill Van Kull and outside the jurisdiction of the City. The applicant is to provide testimony regarding any status of the NJDEP applications regarding this stormwater discharge.

ENVIRONMENTAL

1. The Environmental Impact Statement identifies the site as Level D remediation level. The applicant must provide testimony regarding the current status of the remediation.

Should the Board approve this application, the following will be considered part of the approval resolution:

- The applicant shall comply with all comments of the City Planner, the Office of Planning and Zoning, and the Bayonne Municipal Utilities Authority.
- b. The applicant shall obtain the approvals of all other agencies having jurisdiction and as they may apply including, but not limited to, such agencies as the BMUA, the Bayonne Fire Department, the County of Hudson, Hudson County Soil Conservation District, NJDEP, etc.
- c. Two (2) sets of the final plans as approved by the Board, including all required revisions, shall be submitted to the City Engineer in addition to those sets required by the Office of Planning and Zoning.
- d. The applicant shall submit a unit price construction cost estimate for review by this office. This estimate will be the basis for determining the amount of the Performance Bond and Inspection Escrow.
- e. The applicant must provide the City Engineer and the City Planner with written notice of the start of construction no less than 72 hours in advance and shall contact this office to discuss the scheduling of a preconstruction meeting.
- f. All site improvements, such as stormwater collection devices; street and sidewalk improvements; fences and walls; and landscaping; must be inspected by the City Engineer's office during construction.
- g. The applicant shall immediately replenish as escrow account that has been depleted. It is the applicant's responsibility to check with the Office of Planning and Zoning as to the status of the escrow account balance and maintain a positive balance therein.
- h. In the event this application requires a road opening permit, the applicant must complete any and all openings as soon as possible. It is the applicant's responsibility to ascertain if the street that requires a road opening is scheduled for repaving by checking with the City Engineer or the Director of Public Works. All road openings must be completed prior to any paving of a road by the City.

I trust this provides information that is useful in your review of the proposed project. I intend to be at the Board's meeting should you have any questions about the foregoing.

MEMO

TO:

Bayonne Planning Board

FROM:

James Monkowski, Environmental Specialist g M_{N} .

DATE:

April 6, 2009

RE:

Application # P-09-002

Bayonne Energy Center

401 Hook Road Block 482, Lot 9

In addition to reviewing the submitted plans/reports, I have met with & had additional discussions with representatives from the Bayonne Energy Center.

Based my review of all information, I offer the following;

The project will have minimal effect on air quality during it's operation

Potential noise issues during normal operations have been addressed in a manner to ensure compliance with City & State regulations.

The facility will be using Aqueous Ammonia, rather than Anhydrous Ammonia. This significantly lessens the hazard if a spill should occur. They have agreed to add Ammonia detectors near the storage tank area. The alarm levels will be set prior to operations, after meeting with the Fire Dept and myself.

The facility has agreed to provide the Fire Dept. and myself copies of the Health & Safety Plan for comments prior to beginning operations. They also have readily offered the facility as a location for emergency drills.

I do not see any significant environmental impact from the project.

If you have any questions feel free to contact me. I will be attending the April 23 rd meeting.

CC: John Fussa, City Planner

Lillian Glaszewski, Land Use Administrator

THE CITY OF NEW YORK DEPARTMENT OF TRANSPORTATION 55 Water Street New York, New York 10041

REVOCABLE CONSENT AGREEMENT (Owner)

WHEREAS Bayonne Energy Center, LLC (the "Grantee") has petitioned for consent to construct, maintain and use transmission cables (the "Structure") under and along 25th Street Pier, in the Borough of Brooklyn; and

WHEREAS Grantee is the owner of the real property which is the subject of this consent; and

WHEREAS the New York City Department of Transportation and the Department of Small Business Services (the "Grantor"), acting through their Commissioners, have determined that it is appropriate that such consent be granted, subject to the conditions stated herein;

IT IS HEREBY AGREED:

1. <u>Consent granted.</u> The consent of Grantor is hereby granted to the Grantee, a limited liability company organized and existing under the laws of the State of Delaware and duly authorized to do business in the State of New York, having its principal place of business at c/o ArcLight Capital Partners, LLC, 200 Clarendon Street, 55th Floor, Boston, MA 02117 and c/o Hess Corporation, One Hess Plaza, Woodbridge, NJ 07095, to construct, maintain and use three 5-inch diameter transmission cables, installed into 24-inches diameter conduits, commencing from Consolidated Edison Company of New York, Inc.'s property located on 26th Street, Block 653, Lot 3, and running northwesterly under and diagonally across 25th Street Pier through the properties of NYC Department of Small Business Services located at 25th Street, Block 653, Lot 103 and 25th Street, Block 644, Lot 109, all in the Borough Brooklyn, for the total length 934-feet, 905-feet and 861-feet accordingly, to the U.S. Pier Head Line and entering Gowanus Bay. The Structure to be used for transmitting electricity from a generating facility in Bayonne, NJ to supply electricity to New York City and to be as shown upon a plan consisting of two sheets and entitled:

"Plan showing location of proposed transmission cable to be constructed under 25th Street Pier Borough of Brooklyn to accompany application dated 11/11/09 of Bayonne Energy Center, LLC to the Department of Transportation City of New York"

--and signed Bayonne Energy Center, LLC by Daniel R. Revers, Executive Committee Member, Applicant, a copy of which is attached hereto and made a part hereof, upon the following terms and conditions:

2. <u>Term.</u> This consent shall continue only during the pleasure of the Grantor and shall be revocable at any time by the Grantor, and shall expire on the 30th of June following the twentieth anniversary of its approval by the Mayor (the "Expiration Date").

Revised 06/12/2009 H.D.: 12/30/2009 The Grantee agrees that not later than six months prior to the aforesaid expiration of the term of this consent, it will petition the Grantor in writing for either a renewal or discontinuance thereof.

3. <u>Annual compensation.</u> (a) The Grantee shall pay into the treasury of the City of New York (the "City") as compensation for the privilege hereby granted the compensation described below.

If this is a new consent, such privilege shall become effective on the date of final approval of this consent by the Mayor (the "Approval Date"). Pursuant to the New York City Charter, this consent shall not be implemented until it is registered with the Comptroller of the City of New York. The first annual period shall commence on the Approval Date and shall terminate on the next June 30th following the Approval Date. The first annual period dates and the amount due for such period shall be as indicated on line one of paragraph 3(b), below, prorated from the Approval Date to the end of such first period.

If this is a renewal consent, such privilege shall become effective on the day after the expiration of the previous term of this privilege. The date of final approval of the renewal consent by the Mayor shall also be referred to as the Approval Date. The first annual period shall commence with the first period described in paragraph 3(b), below. The amount due shall be as indicated on line one of paragraph 3(b), below, less all prior payments made for this period, pursuant to paragraph 3(c), below.

An invoice setting forth the amount due for the first period shall be provided by Grantor within thirty (30) days after the Approval Date. The first payment due shall be made within thirty (30) days after the date of such invoice.

(b) For the first year of the consent, the annual period commencing on the date of the final approval of this consent by the Mayor (the "Approval Date") and terminating on June 30, 2010:

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- $35,358/annum

For the period July 1, 2010 to June 30, 2011 - $36,419

For the period July 1, 2011 to June 30, 2012 - $37,480

For the period July 1, 2012 to June 30, 2013 - $38,541

For the period July 1, 2013 to June 30, 2014 - $39,602

For the period July 1, 2014 to June 30, 2015 - $40,663

For the period July 1, 2015 to June 30, 2016 - $41,724

For the period July 1, 2016 to June 30, 2017 - $42,785

For the period July 1, 2017 to June 30, 2018 - $43,846

For the period July 1, 2018 to June 30, 2019 - $44,907

For the period July 1, 2019 to June 30, 2020 - $45,968
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During the period July 1, 2020 to June 30, 2030 – an amount computed on the basis of the rate schedule for revocable consents in effect on July 1, 2020.

Annual payments shall be made in advance on or before July 1 of each year, provided, however, that the first payment shall be made as provided in paragraph 3(a), above.

- (c) In the event the Grantee continues the maintenance and/or operation of the Structure after and in spite of the termination or expiration of this consent, the Grantee agrees to pay to the City the compensation as set forth herein at the rate in effect at the time of such termination or expiration and in the manner set forth herein, together with all taxes it would have been required to pay had its maintenance and operation been duly authorized. Such payments shall not be deemed to constitute an extension of this consent and all of the City's rights shall remain in full force and effect notwithstanding such payments. Such rate of compensation shall continue up to the date of the restoration of the street after the removal, or deactivation at the discretion of the grantor, of the Structure. During the period of continued maintenance and/or operation of the Structure, the Grantee shall be bound by all of the terms and conditions of this consent.
- (d) In the event that a future agreement for this Structure becomes effective subsequent to the expiration of this agreement, it is understood and agreed that as a condition of such future grant of consent the fees charged under such grant may be at the rate in effect during the period following the expiration date of this agreement.
- (e) In the event any payment is not made on or before the date such payment is due, interest on such payment shall apply from the date such payment is due at the rate of one and one-half percent (1 1/2%) per month. If the Grantee shall fail to pay such compensation or taxes, or the interest thereon, if any, the Comptroller may withdraw the amounts thereof from the security fund hereinafter provided for. If the compensation or taxes owed exceeds the amount available in the security fund the Grantee shall be liable for the shortfall, and shall pay such to the City upon demand.
- (f) The compensation provided herein shall not be considered in any manner in the nature of a tax, but shall be in addition to any and all taxes of whatsoever kind or description now or hereafter required to be paid under any local law of the City or by any law of the State of New York.
- 4. <u>Removal or deactivation of structure.</u> Within ten (10) days after the revocation or termination of this consent, the Grantee shall cause the Structure to be removed, or deactivated at the discretion of the Grantor, and all of the street affected thereby to be restored to its proper condition to the satisfaction of the Grantor. The entire cost of such work shall be borne by the Grantee.

If Grantee fails to so remove or deactivate the Structure, or so restore such street, within the time period stated above, Grantor shall have the right to cause the Structure to be removed or deactivated and such street to be restored. The cost to Grantor of causing such removal or deactivation and/or restoration shall be recovered from the security fund as provided for in this consent. If the cost of removal or deactivation and/or restoration exceeds the amount available in the security fund, the Grantee shall be liable for the shortfall, and shall pay such to the City upon demand.

5. Restrictions against transfer of use of consent. This consent is for the exclusive use of the Grantee and solely for the purpose hereinabove mentioned and this consent for use shall not, either in whole or in part, be sold, assigned, leased or sublet in any manner, nor shall title thereto, or right, interest or property therein pass to or vest in any

other person, firm or entity whatsoever, either by the acts of the Grantee or by operation of law, without the express written consent of the Grantor, which consent may be withheld by the Grantor in its sole discretion.

- 6. <u>Filing with the County Clerk.</u> Grantor shall file a copy of the consent agreement with the County Clerk (or other appropriate office if required by a specific borough) in the borough where the property is located.
- 7. <u>Grantee responsible for all costs.</u> The Grantee shall pay the entire cost of all work, labor and material in connection with the Structure, and particularly,
- (a) construction, maintenance, repair, use, operation, breakthrough, deactivation, alteration or removal of the Structure;
- (b) the protection of all structures which shall in any way be disturbed by the construction, maintenance, repair, use, operation, breakthrough, deactivation, alteration or removal of the Structure;
- (c) if this is an underground structure, any and all changes in sewers or other subsurface structures necessitated by the construction, maintenance, repair, use, operation, breakthrough, deactivation, alteration or removal of the Structure, including the laying or relaying of pipes, conduits, sewers or other structures;
- (d) the replacing or restoring of the pavement in the affected street which may be disturbed during the construction, maintenance, repair, use, operation, breakthrough, deactivation, alteration or removal of the Structure;
- (e) each and every item of the increased cost of the installation of any future structures or repairs or alterations to any existing or future structures caused by the presence in the street of the Structure; and
- (f) the inspection of all work during the construction, maintenance, repair, use, operation, breakthrough, deactivation, alteration or removal of the Structure as herein provided which may be required by the Grantor or any other governmental entity having jurisdiction.
- 8. <u>Construction requirements.</u> Prior to the commencement of any construction, alteration, deactivation or removal of the Structure, the Grantee shall obtain, at its sole cost and expense, any and all licenses, permits or other forms of approval or authorization which may be required by Grantor or any other governmental entity having jurisdiction. The Grantee shall perform all the duties which may be imposed by those agencies as conditions of such forms of approval or authorization, provided such conditions are not inconsistent with the provisions of this consent. The Grantee shall submit to the Grantor working plans which shall include and show in detail the method of construction of the Structure and the mode of protection or changes in all structures required by the construction, alteration, deactivation or removal of the same.

Upon the completion of the work the Grantee shall furnish to the Grantor and to any other governmental entity having jurisdiction, plans of such character as may be directed, showing accurately and distinctly the location, size and type of construction, and complete dimensions of the Structure erected or installed under this consent; also the location and dimensions of all substructures encountered during the progress of the work.

Revised 06/12/2009 H.D.: 12/30/2009 If so ordered by the Grantor, all work in connection with the installation, repair, deactivation or removal of the Structure shall be carried on only at night or continuously for twenty-four (24) hours each day.

- 9. <u>City's access paramount.</u> The Grantee shall allow to the City a right of way under or above any part of the Structure for any and all structures which are now or may be hereafter placed in the affected street by the City.
- If, in the exercise of the sole discretion of the Grantor, the Grantor at any time decides to replace, alter or otherwise gain access to any structure located in or on the street that is affected by the Structure, the Grantor shall have the right to break through or remove all or any portion of the Structure. The cost to the Grantor of breaking through or removing the Structure shall be recovered from the security fund as provided for in this consent. If the cost of breaking through or removal exceeds the amount available in the security fund, the Grantee shall be liable for the shortfall, and shall pay such to the City upon demand. Should the Grantor determine at its sole discretion that the breaking through or removal of the Structure should be performed by Grantee, Grantor shall have the option of requiring Grantee to break through or remove the Structure at its sole cost and expense as detailed in Article 7 herein.
- 10. <u>Structure subject to City's supervision.</u> The Structure and any fixtures laid therein shall be constructed, maintained and operated subject to the supervision and control of the proper authorities of the City. The Grantee shall protect the Structure for which consent has been granted. Whenever such Structure is about to be disturbed by the regulating or grading of any street, the Grantee shall, on the receipt of a written notice from the City or its contractor, remove or otherwise protect and replace its Structure, and all fixtures and appliances connected therewith or attached thereto, where necessary, under the direction of the Commissioner. All such removal, protection, replacement or related activities required by this section shall be at the sole cost and expense of the Grantee. The City will endeavor to provide a thirty (30) day notice of such requirements, but reserves the right to require action sooner in cases of emergency. The Structure shall be open at all times to the inspection of all the authorities having jurisdiction.
- 11. <u>Consent subject to rights of abutting property owners.</u> This consent is subject to whatever right, title or interest the owners of abutting property or others may have in and to the affected street.
- 12. <u>No rights conveyed.</u> The Grantee acquires no right, title or interest in the space permitted to be occupied herein and it is expressly understood that said occupancy is considered temporary.
- 13. <u>Maintenance of structure.</u> The Grantee agrees to maintain the Structure in good, clean condition and shall not allow it to deteriorate, become unsightly, or develop into a dangerous condition or a condition which is not in the best interests of the general public.
- 14. <u>No alienation of City's rights.</u> It is expressly understood that the grant of this consent will not alienate or diminish the absolute right of the City to reenter into full

possession of the street space described herein for any reason whatsoever, free of any encumbrance or obligation, upon the expiration of this consent or upon its revocation and cancellation.

- 15. <u>Unconditional right of revocation.</u> The Grantee expressly agrees that the Grantor may unconditionally revoke this consent and terminate the period thereof at any time without liability, at will, any provision herein to the contrary notwithstanding. In the event of such revocation and termination, the Grantee shall remain liable for the due and full performance of all the terms, covenants and conditions contained herein to be performed up to the time of said termination, and the Grantee's obligation to pay compensation shall continue up to the date of the removal of the Structure, or its deactivation at the discretion of the Grantor, and the restoration of the street affected thereby to the satisfaction of the Grantor.
- 16. <u>Security fund.</u> This agreement is contingent upon the express condition that in advance of the Approval Date, and before anything is done in exercise of the privilege conferred hereby, the Grantee shall deposit with the Comptroller of the City the sum of Forty Six Thousand Dollars (\$46,000), in such form as shall be acceptable to the Comptroller, which fund shall be security for (a) the performance of all the terms and conditions of this consent and (b) the payment of all sums of money (including taxes) which may be due the City because of the construction, maintenance, repair, use, operation, abandonment, breakthrough, deactivation, alteration or removal of the Structure.

In case of default in the performance by Grantee of any of such terms and conditions, the Grantor shall have the right to cause the work to be done and the materials to be furnished for making the necessary changes or repairs, after ten (10) days' notice to the Grantee, and shall collect the cost thereof from the security fund, or in case of default in the payment of the annual charge or in the payment of any other sum of money (including taxes) which may become due to the City because of the construction, maintenance, repair, use, operation, abandonment, breakthrough, deactivation, alteration or removal of the Structure, the Grantor shall collect the same, with interest, from the security fund after ten (10) days' notice in writing to the Grantee.

In case of any drafts so made upon the security fund, the Grantee shall, upon ten (10) days' notice in writing, pay to the Comptroller of the City a sum of money sufficient to restore the fund to the original amount and in default of the payment thereof, this consent may be canceled and annulled, at the option of the Grantor.

If the amount deposited in the security fund is insufficient to cover any costs to the Grantor or any sum of money due to the Grantor, the Grantee shall be liable for the shortfall and shall pay such to the City upon demand.

Upon the termination or revocation of this consent, and at such time as the Structure has been removed, or deactivated at the discretion of the Grantor, and the street affected thereby has been restored to its proper condition to the satisfaction of the Grantor, in accordance with the terms of this consent, any amount remaining in the security fund shall be repaid to Grantee without interest.

No action or proceeding or rights under the provisions of this section shall affect any other legal rights, remedies or causes of action belonging to the City.

- 17. <u>Notice required before work commences.</u> Grantee shall give notice, in writing, to the Grantor and any other governmental entity having jurisdiction of its intention to begin the work hereby authorized at least forty-eight (48) hours before such work commences.
- 18. <u>Discrimination prohibited.</u> Pursuant to applicable laws prohibiting discrimination in employment, the Grantee agrees that it will not engage in any unlawful discrimination against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability, marital status or sexual orientation with respect to all employment decisions including, but not limited to, recruitment, hiring, upgrading, demotion, downgrading, transfer, training, rates of pay or other forms of compensation, layoff, termination, and all other terms and conditions of employment.
- 19. <u>Compliance with applicable laws.</u> This consent is granted on the further and express condition that Grantee shall strictly comply with all applicable laws now in force or which may hereafter be adopted.
- Indemnification and insurance. To the extent permitted by law, the Grantee shall 20. be liable for, and shall hold the City, its officers, agents, servants or employees (the "Indemnitees") harmless from, all liabilities, obligations, fines, damages, penalties, claims, charges and expenses (including, without limitation, reasonable attorneys' fees and disbursements) ("Damages") that may be imposed upon or incurred by or asserted against any of the Indemnitees arising out of the construction, maintenance, repair, use, operation, abandonment, deactivation, alteration or removal or by reason of any defect or deterioration of the Structure, or otherwise in connection with this consent, whether or not the Damages are due to the negligence or otherwise of the City, its officers, agents, servants or employees. It is a condition of this consent that the City assumes no liability for Damages to either persons or property on account of this consent. The Grantee shall, within thirty (30) days after the Approval Date and before anything is done in exercise of the privilege conferred hereby, furnish and maintain on file with the Grantor, throughout the term of this consent, a certificate of insurance. issued by a company licensed to do business in the State of New York, with an AM Best rating not less than A-(7), evidencing insurance coverage of the Grantee, the City and the Grantor for any injuries or Damages occurring on, or in proximity to, the Structure, or arising out of or as a result of the construction, maintenance, repair, use, operation, abandonment, deactivation alteration or removal or by reason of any defect of deterioration thereof, and identifying the City and the Grantor as additional insureds, in the following minimum amounts: (1) for bodily injury, including death, (a) \$250,000 for any one person and (b) \$1,000,000 for any one occurrence, and (2) for property damage in the minimum amount of \$100,000.

All insurance policies shall provide for at least forty-five (45) days prior written notice to be given to the City in the event that any coverage is modified to the detriment of the City, canceled, or not renewed. At least thirty (30) days prior to the expiration of each policy period, the Grantee shall deliver to the City a certificate of insurance evidencing a replacement policy to be effective immediately upon the termination of the previous

policy. In no event shall a lapse in the insurance coverage required under this Section occur at any time during the existence of the Structure, and replacement coverage meeting the requirements of this Section shall be in effect prior to the expiration of any policy period. The insurance requirements set forth in this Section shall in no way be intended to modify, limit or reduce the Grantee's obligations under any other indemnifications made in this consent by the Grantee to the City, or limit the Grantee's liability under this consent to the limits of the policies of insurance required to be maintained by the Grantee, hereunder. Any insurance coverage maintained pursuant to this agreement shall contain the following endorsement: "It is hereby understood and agreed that this policy may not be canceled, terminated or modified to the detriment of the City, nor may the insurer's intention not to renew be implemented, until forty-five (45) days after receipt by the New York City Department of Transportation, Division of Franchises, Concessions and Consents, of a written notice delivered by the insurer via registered mail of such intent to so cancel, terminate, modify or not renew." Failure to maintain insurance coverage in the foregoing amounts shall be a default under this consent.

Such certificate (s) and policy (s) shall provide that no notice of accident or claim shall be required of the Grantor and that notice of any summons and complaint shall be deemed timely on behalf of the Grantor if received by the insurance company from any source within ninety (90) days of service thereof.

21. INVESTIGATION CLAUSE

21.01 The parties to this agreement agree to cooperate fully and faithfully with any investigation, audit or inquiry relative to this agreement conducted by a State of New York (State) or City of New York (City) governmental agency or authority that is empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath, or conducted by the Inspector General of a governmental agency that is a party in interest to this agreement or when it is the subject of the investigation, audit or inquiry.

21.02 A hearing shall be convened in accordance with section 21.03 below if (a) any person who has been advised that his or her statement, and any information from such statement, will not be used against him or her in any subsequent criminal proceeding, refuses to testify concerning the award of, or performance under, this agreement, before a grand jury or other governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to examine witnesses under oath; or (b) any person refuses to testify concerning the award of, or performance under, this agreement, for a reason other than the assertion of his or her privilege against self-incrimination in an investigation, audit or inquiry conducted by a City or State governmental agency or authority empowered directly or by designation to compel the attendance of witnesses and to take testimony under oath, or by the Inspector General of the governmental agency that is a party in interest in, and is seeking testimony.

21.03 (a) The Commissioner or agency head whose agency is a party in interest to this agreement shall convene a hearing, upon not less than five (5) days' written notice to

the parties involved to determine if any penalties should attach for the failure of a person to testify.

- (b) If any non-governmental party to the hearing requests an adjournment, the commissioner or agency head who convened the hearing may, upon granting the adjournment, suspend this agreement pending the final determination pursuant to section 21.05 below without the City incurring any penalty or damages for delay or otherwise.
- 21.04 The penalties which may attach after a final determination by the commissioner or agency head may include but shall not exceed:
- (a) The disqualification for a period not to exceed five (5) years from the date of an adverse determination of any person, or any entity of which such person was a member at the time the testimony was sought, from submitting bids for, or transacting business with, or entering into or obtaining any contract, lease, permit or license with or from the City; and/or
- (b) The cancellation or termination of any and all such existing City contracts, leases, permits or licenses that the refusal to testify concerns and that have not been assigned as permitted under this agreement, nor the proceeds of which pledged, to an unaffiliated and unrelated institutional lender for fair value prior to the issuance of the notice scheduling the hearing, without the City incurring any penalty or damages on account of such cancellation of termination; monies lawfully due for goods delivered, work done, rentals, or fees accrued prior to the cancellation or termination shall be paid by the City.
- 21.05 The Commissioner or agency head shall consider and address in reaching his or her determination and in assessing an appropriate penalty the factors in paragraphs (a) and (b) below. He or she may also consider, if relevant and appropriate, the criteria established in paragraphs (c) and (d) below in addition to any other information which may be relevant and appropriate.
- (a) The parties' good faith endeavors or lack thereof to cooperate fully and faithfully with any governmental investigation or audit, including but not limited to the discipline, discharge, or disassociation of any person failing to testify, the production of accurate and complete books and records, and the forthcoming testimony of all other members, agents, assignees or fiduciaries whose testimony is sought.
- (b) The relationship of the person who refused to testify to any entity that is a party to the hearing, including, but not limited to, whether the person whose testimony is sought has an ownership interest in the entity and/or the degree of authority and responsibility the person has within the entity.
- (c) The nexus of the testimony sought to the subject entity and its contracts, leases, permits or licenses with the City.

- (d) The effect a penalty may have on an unaffiliated and unrelated party or entity that has significant interest in an entity subject to penalties under section 21.04 above, provided that the party or entity has given actual notice to the commissioner or agency head upon the acquisition of the interest, or at the hearing called for in section 21.03(a) above gives notice and proves that such interest was previously acquired. Under either circumstance the party or entity must present evidence at the hearing demonstrating the potential adverse impact a penalty will have on such person or entity.
- 21.06 (a) The term "license" or "permit" as used herein shall be defined as a license, permit, revocable consent, franchise or concession not granted as a matter of right.
- (b) The term "person" as used herein shall be defined as any natural person doing business alone or associated with another person or entity as a partner, director, officer, principal or employee.
- (c) The term "entity" as used herein shall be defined as any firm, partnership, corporation, association, or person that receives monies, benefits, licenses, leases, or permits from or through the City or otherwise transacts business with the City.
- (d) The term "member" as used herein shall be defined as any person associated with another person or entity as a partner, director, officer, principal or employee.
- 22. <u>Special construction requirements.</u> The Grantee shall perform such other special construction requirements as are contained in the Schedule attached hereto and made a part hereof, if any.

If the Grantee shall be performing work associated with the installation of geothermal wells, the Grantee shall be bound by the terms of the attached Drilling Schedule and rider. In the event of a conflict between this agreement and the rider or Drilling Schedule, the rider or the Drilling Schedule shall take precedence.

23. <u>Severability and Headings.</u> The clauses and provisions of this Revocable Consent Agreement are intended to be severable. The unconstitutionality or unconscionability of any term, clause or provision shall in no way defeat the effect of any other term, clause or provision.

Section and other headings are inserted for convenience only and shall not be used in any way to construe the terms of this Agreement.

- 24. <u>Advertising.</u> No advertisement shall be placed on, affixed to, projected from, or in any way displayed on the Structure unless expressly authorized by this Agreement.
- 25. <u>Modification or amendment.</u> This Agreement constitutes the entire agreement between the parties hereto and no other representation made heretofore shall be binding upon the parties hereto. This Agreement may not be modified or amended except by written agreement executed by the parties hereto.

Schedule

The New York City One Call Center shall be notified 10 working days prior to digging to ensure that no underground utility lines are affected by the proposed work.

In Witness Whereof, the parties hereunder have caused this revocable consent to be executed.

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NYC DEPARTMENT OF TRANSPORTATION DIVISION OF FRANCHISES, CONCESSIONS & CONSENTS

By:	And	
•	Anne Koenig	
	Evecutive Director	

DEPARTMENT OF SMALL BUSINESS SERVICES

By:	an Silvet	_
•	Andrew Schwartz	

First Deputy Commissioner

Accepted and agreed to: GRANTEE:

Bayonne Energy Center, LLC

Ву:	(Signature)	(Signature)
	Tohn Schultz (Print Name of Signatory)	Daniel R. Revers (Print Name of Signatory)
	Executive Committee Member (Title)	Executive Committee Member (Title)
		<u>2/5/10</u> (Date)

The foregoing consent is hereby approved. MICHAEL R. BLOOMBERG, MAYOR

By:

David Taylor-Fink, Associate Director for Program Administration Mayor's Office of Contract Services

Dated, New York 3/20/10

Revised 06/12/2009 H.D.: 12/30/2009

Acknowledgment by Executive Director

State, City and County of New York, ss.:

On the May of March, in the year 2010, before me, the undersigned, personally appeared where within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of whom the individual(s) acted, executed the instrument.

Notary Public or Commissioner of Deeds

MARGARET P. EDWARDS
Commissioner of Deeds
City of New York No. 2-13204
Certificate Filed in New York County
Commission Expires Oct. 01, 2011

Acknowledgment by the Department of Small Business Services.

State, City and County of New York, ss.:

On the <u>5</u> day of <u>MARCH</u> , in the year <u>2010</u> , before me, the undersigned,
personally appeared ANDREW SCHWARTZ, personally known to me or
proved to me on the basis of satisfactory evidence to be the individual(s) whose
name(s) is(are) subscribed to the within instrument and acknowledged to me that
he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their
signature(s) on the instrument, the individual(s), or the person upon behalf of whom the
individual(s) acted, executed the instrument.

Devid Sillan

Notary Public or Commissioner of Deeds

DAVID D. WEAVER

NIOTARY PUBLIC, STATE OF NEW YORK

NO. 01WE6137997

QUALIFIED IN KINGS COUNTY

MY COMMISSION EXPIRES DEC. 12, 20_13

Revised 06/12/2009 H.D.: 12/30/2009

Acknowledgment by Limited Liability Company

State of New Jersey County of middlesex
County of middlesex

State, City, and County of New York, ss.,

On the 9th day of February, in the year 2010, before me, the undersigned,
personally appeared John Schultz, personally known to me or
proved to me on the basis of satisfactory evidence to be the individual(s) whose
name(s) is(are) subscribed to the within instrument and acknowledged to me that
he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their
signature(s) on the instrument, the individual(s), or the person upon behalf of whom the
individual(s) acted, executed the instrument.

Notary Public or Commissioner of Deeds

COLLEEN M. FROST ID No. 2298543 NOTARY PUBLIC OF NEW JERSEY My Commission Expires Apr. 1, 2013

Acknowledgment by Limited Liability Company

Commonwo	ealth of	Massach	usetts	
County of State, City	- Suffe	IK.	V 1	
- State, City	, and Co	unty of Ne	W YORK,	SS.,

On the 5th day of February, in the year 2010, before me, the undersigned,
personally appeared
proved to me on the basis of satisfactory evidence to be the individual(s) whose
name(s) is(are) subscribed to the within instrument and acknowledged to me that
he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their
signature(s) on the instrument, the individual(s), or the person upon behalf of whom the
individual(s) acted, executed the instrument.

Notary Public or Commissioner of Deeds

Elisabeth A. Wallace
Notary Public
Commonwealth of Massachusetts
My Commission Expires
November 21, 2014

Revised 06/12/2009 H.D.: 12/30/2009

APPROVAL AS TO FORM AND CERTIFIED AS TO LEGAL AUTHORITY OF A REVOCABLE CONSENT AGREEMENT BY STANDARD TYPE OF CLASS

AGENCY:

Transportation ·

REVOCABLE CONSENT AGREEMENT:

Owner

I hereby approve as to form and certify as to legal authority the annexed revocable consent agreement by standard type of class. This approval is valid for one year and for a maximum of 300 consents.

The above approval is made on the express understanding that the substantive language of the subject revocable consent agreements will not be altered or changed in any way without prior submission to the office of the Corporation Counsel for approval, provided, however, that blank spaces in the revocable consent agreements requiring names, dates, locations, dollar amounts or other similar details may be completed.

ACTING CORPORATION COUNSEL

JN 2 200



THOMAS A. DeGISE COUNTY EXECUTIVE

COUNTY OF HUDSON
DEPARTMENT OF PARKS, ENGINEERING & PLANNING
DIVISION OF PLANNING
BRENNAN COURT HOUSE
583 NEWARK AVENUE
JERSEY CITY, NEW JERSEY 07306
WWW.HUDSONCOUNTYNI.ORG/PLANNING

(201) 217-5137 FAX (201) 795-7856

MARIANO VEGA, JR. DIRECTOR

STEPHEN D. MARKS, PP, AICP DIVISION CHIEF

April 3, 2009

Transmitted Via Fax (732) 726-6691 and Regular Mail

Stephen E. Barcan Wilentz, Goldman & Spitzer, P.A. 90 Woodbridge Center Woodbridge, NJ 07095

Re: HCPB Application No. 2008-006-SP

401 Hook Road Block: 482, Lot: 9 Bayonne, NJ

Dear Mr. Barcan:

Please be advised that the Hudson County Planning Board reviewed application no. 2008-006-SP, at a regular meeting held on 3/18/2009.

The application was declared exempt by the Hudson County Planning Board. Therefore, no further action is required by the applicant.

If you have any questions or need additional information, please feel free to call the Division of Planning during regular business hours.

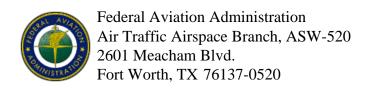
Sincerely,

Stephen D. Marks, PP, AICP

Planning Director

c. Mary Avagliano, Chair and HCPB Commissioners
Thomas P. Calvanico, Esq., Board Attorney
Borivoj Jasek, P.E., P.P., County Engineer
Municipal Planning Board Secretary
Construction Code Official
Zoning Officer

File: 2009-006-SP



Issued Date: 02/27/2009

Neil Collins Bayonne Energy Center, LLC 25 Mall Road Burlington, MA 01803

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Stack Stack 1 Location: Bayonne, NJ

Latitude: 40-39-11.02N NAD 83

Longitude: 74-05-29.66W

Heights: 151 feet above ground level (AGL)

161 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AEA-416-OE.

Signature Control No: 618902-108455517

(DNE)

Robert Alexander Specialist



Issued Date: 02/27/2009

Neil Collins Bayonne Energy Center, LLC 25 Mall Road Burlington, MA 01803

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Stack Stack 2 Location: Bayonne, NJ

Latitude: 40-39-10.87N NAD 83

Longitude: 74-05-29.50W

Heights: 151 feet above ground level (AGL)

161 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

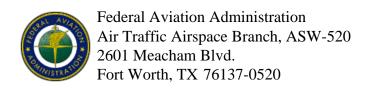
This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AEA-417-OE.

Signature Control No: 618903-108455521 (DNE)



Neil Collins Bayonne Energy Center, LLC 25 Mall Road Burlington, MA 01803

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Stack Stack 3
Location: Bayonne, NJ

Latitude: 40-39-09.27N NAD 83

Longitude: 74-05-27.89W

Heights: 151 feet above ground level (AGL)

161 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

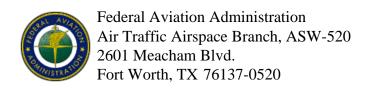
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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AEA-418-OE.

Signature Control No: 618904-108455522 (DNE)



Neil Collins Bayonne Energy Center, LLC 25 Mall Road Burlington, MA 01803

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Stack Stack 4
Location: Bayonne, NJ

Latitude: 40-39-09.11N NAD 83

Longitude: 74-05-27.73W

Heights: 151 feet above ground level (AGL)

161 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

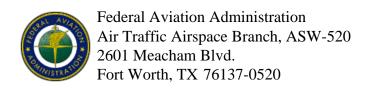
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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AEA-419-OE.

Signature Control No: 618905-108455520 (DNE)



Neil Collins Bayonne Energy Center, LLC 25 Mall Road Burlington, MA 01803

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Stack Stack 5 Location: Bayonne, NJ

Latitude: 40-39-08.28N NAD 83

Longitude: 74-05-29.13W

Heights: 151 feet above ground level (AGL)

161 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

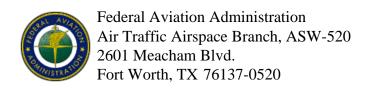
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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AEA-420-OE.

Signature Control No: 618906-108455519 (DNE)



Neil Collins Bayonne Energy Center, LLC 25 Mall Road Burlington, MA 01803

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Stack Stack 6 Location: Bayonne, NJ

Latitude: 40-39-08.44N NAD 83

Longitude: 74-05-29.29W

Heights: 151 feet above ground level (AGL)

161 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

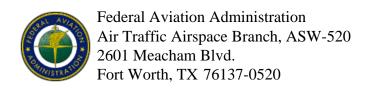
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This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AEA-421-OE.

Signature Control No: 618907-108455523 (DNE)



Neil Collins Bayonne Energy Center, LLC 25 Mall Road Burlington, MA 01803

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Stack Stack 7
Location: Bayonne, NJ

Latitude: 40-39-10.04N NAD 83

Longitude: 74-05-30.92W

Heights: 151 feet above ground level (AGL)

161 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

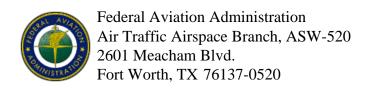
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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AEA-422-OE.

(DNE)

Signature Control No: 618908-108455518



Neil Collins Bayonne Energy Center, LLC 25 Mall Road Burlington, MA 01803

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Stack Stack 8 Location: Bayonne, NJ

Latitude: 40-39-10.20N NAD 83

Longitude: 74-05-31.09W

Heights: 151 feet above ground level (AGL)

161 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

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This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (718) 553-4546. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-AEA-423-OE.

Signature Control No: 618909-108455524 (DNE)