

Carlsbad Energy Center LLC

804 Carnegie Center
Princeton, NJ 08540
Phone: 760-710-3970

May 1, 2019

Mr. Nicholas Horres
Senior Air Pollution Control Engineer
San Diego County Air Pollution Control District
10124 Old Grove Road
San Diego, CA 92131-1649

**Subject: Carlsbad Energy Center, Title V Application: APCD2014-APP-003480
through APCD2014-APP-003487**

Dear Mr. Horres:

Enclosed is Carlsbad Energy Center LLC's Title V application for the recently completed Carlsbad Energy Center Project. Included are the following County of San Diego Air Pollution Control District (SDAPCD) Title V Application forms:

- APCD General Application
- APCD Form 1401-A1 and A2, Stationary Source Summary
- APCD Form 1401-H1, Applicable Requirements Summary Checklist
- APCD Form 1401-H2, List of Permits by Equipment Category
- APCD Form 1401-I, Certification Statement
- APCD Form 1401-K, Compliance Certification Schedule
- APCD Form 1401-L, Schedule of Compliance
- APCD Form 1401-M, Abatement Devices
- APCD Form 1401-N, Alternative Operating Scenario
- APCD Form 1401-O, Multiple Applicable Requirements Streamlining
- APCD Form 1401-Q, Permit Shield

Also enclosed is a check for \$2,180.00 for the initial deposit of the filing fees, as discussed on April 17, 2019. If you have any questions or concerns, please contact Ryan Goerl (ryan.goerl@nrg.com) at (760) 573-3802 or George Piantka (george.piantka@nrg.com) at (760) 707-6833.

Sincerely,
Carlsbad Energy Center LLC
By: Its Authorized Agent,

By: NRG California Peaker Operations LLC
Paul Mattesich
Plant Manager

cc: Ryan Goerl, NRG
George Piantka, NRG

Internal Use Only	
APP ID: APCD 2019-APP/GER-	005818
SITE ID: APCD 1982-SITE-	00195

**GENERAL PERMIT OR
REGISTRATION
APPLICATION FORM**



Submittal of this application does not grant permission to construct or to operate equipment except as specified in Rule 24(c).

REASON FOR SUBMITTAL OF APPLICATION:

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> New Installation | <input type="checkbox"/> Existing Unpermitted Equipment or Rule 11 Change | <input type="checkbox"/> Modification of Existing Permitted Equipment |
| <input type="checkbox"/> Amendment to Existing Authority to Construct or Application | <input type="checkbox"/> Change of Equipment Location | <input type="checkbox"/> Change of Equipment Ownership (please provide proof of ownership) |
| <input type="checkbox"/> Change of Permit Conditions | <input type="checkbox"/> Change Permit to Operate Status to Inactive | <input type="checkbox"/> Banking Emissions |
| <input type="checkbox"/> Registration of Portable Equipment | <input type="checkbox"/> Other (Specify) _____ | |

List affected APP/PTO Record ID(s): APCD2014-App-003480 thru APCD2014-APP-003487

APPLICANT INFORMATION

Name of Business (DBA) Carlsbad Energy Center
 Does this organization own or operate any other APCD permitted equipment at this or any other adjacent locations? Yes No
 If yes, list assigned Site Record IDs listed on your Permits _____
 Name of Legal Owner (if different from DBA) Carlsbad Energy Center LLC

Equipment Owner	Authority to Construct Mailing Address
Name: <u>Carlsbad Energy Center LLC</u>	Name: <u>Carlsbad Energy Center LLC</u>
Mailing Address: <u>4950 Avenida Encina</u>	Mailing Address: <u>4950 Avenida Encinas</u>
City: <u>Carlsbad</u> State: <u>CA</u> Zip: <u>92008</u>	City: <u>Carlsbad</u> State: <u>CA</u> Zip: <u>92008</u>
Phone: <u>(760) 573-3802</u>	Phone: <u>()</u>
E-Mail Address: <u>ryan.goerl@nrg.com</u>	E-Mail Address: <u>ryan.goerl@nrg.com</u>

Permit To Operate Mailing Address	Invoice Mailing Address
Name: <u>same as above</u>	Name: <u>same as above</u>
Mailing Address:	Mailing Address:
City: State: Zip:	City: State: Zip:
Phone: ()	Phone: ()
E-Mail Address:	E-Mail Address:

EQUIPMENT/PROCESS INFORMATION: Type of Equipment: Stationary Portable, *if portable please enter below the equipment storage address.* If portable, will operation exceed 12 consecutive months at the same location Yes No
 Equipment Location Address 4950 Avenida Encina City Carlsbad State: CA
 Parcel No. 210-010-47 Zip 92008 Phone () E-mail: ryan.goerl@nrg.com
 Site Contact Ryan Goerl Phone (760) 573-3802

General Description of Equipment/Process natural gas combustion turbines for electricity generation
 Application Submitted by Owner Operator Contractor Consultant Affiliation _____

EXPEDITED APPLICATION PROCESSING: I hereby request Expedited Application Processing and understand that:
 a) Expedited processing will incur additional fees and permits will not be issued until the additional fees are paid in full (see Rule 40(d)(8)(iv) for details) b) Expedited processing is contingent on the availability of qualified staff c) Once engineering review has begun this request cannot be cancelled d) Expedited processing does not guarantee action by any specific date nor does it guarantee permit approval.

I hereby certify that all information provided on this application is true and correct.
 SIGNATURE [Signature] Date 05/01/2019
 Print Name Paul Mattesich Company NRG Energy Services Group
 Phone (805) 616-5836 E-mail Address _____

Internal Use Only			
Date <u>5/2/19</u>	Staff Initials: <u>cm</u>	Amt Rec'd \$ <u>2190</u>	Fee Schedule <u>TU = 2025 BTM</u>
RNP: <u>0</u>	EMF: <u>0</u>	NBF: <u>105</u> TA: _____	

**San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A1)**

Company Name <u>Carlsbad Energy Center LLC</u>	District Use Only NEDS # _____ SITE ID # _____
--	---

I. FACILITY IDENTIFICATION

1. Facility Name (if different than company name): Carlsbad Energy Center
2. Four digit SIC Code: SIC 4911/ NAICS 221112
3. Parent Company (if different than Company Name): Carlsbad Energy Center LLC
4. Mailing Address: 4950 Avenida Encinas
City Carlsbad State CA Zip 92008
5. Street Address or Source Location: 4950 Avenida Encinas
City Carlsbad State CA Zip 92008
6. UTM Coordinates: Lat 33-08-26.57N NAD83; Long 117-20-02.16W (Unit #9 stack)
7. Source Located within 50 miles of a state line: Yes No (All sources **are** within 50 miles)
8. Source Located within 1000 feet of a school: Yes No
9. Type of Organization: Corporation Sole Ownership Government
 Partnership Utility Company
10. Legal Owner's Name: Carlsbad Energy Center LLC
11. Owner's Agent name (if any): George Piantka / 760-707-6833
12. Responsible Official: Paul Mattesich
13. Plant Site Manager/Contact: Paul Mattesich Phone #: 805-616-5836 FAX #: _____
14. Application Contact: Ryan Goerl
15. Type of Facility: Electricity Generation
16. General description of processes/products: natural gas combustion turbines for electricity generation
17. Is a Federal Risk Management Plan (RMP) pursuant to Section 112(r) required? Yes No
(If application is submitted after RMP due date, attach verification that plan is registered with the appropriate agency.)

II. TYPE OF PERMIT ACTION (check)	CURRENT PERMIT (permit number)	EXPIRATION (date)
<input checked="" type="checkbox"/> Initial Title V Application	N/A	N/A
<input type="checkbox"/> Permit Renewal		
<input type="checkbox"/> Significant Permit Modification		
<input type="checkbox"/> Minor Permit Modification		
<input type="checkbox"/> Administrative Amendment		

III. DESCRIPTION OF PERMIT ACTION

1. Does the permit action requested involve:

<input checked="" type="checkbox"/> Acid Rain Source	<input type="checkbox"/> Temporary Source	<input type="checkbox"/> Voluntary Emissions Caps
<input checked="" type="checkbox"/> CEMs	<input type="checkbox"/> Alternative Operating Scenarios	<input type="checkbox"/> Abatement Devices
<input type="checkbox"/> Outdated SIP Requirement Streamlining	<input type="checkbox"/> Permit Shield	
<input type="checkbox"/> Source Subject to MACT Requirements [Section 112]	<input type="checkbox"/> Multiple Applicable Requirement Streamlining	
<input type="checkbox"/> Source Subject to Enhanced Monitoring (40CFR64) [Compliance Assurance Monitoring]		
2. Is source operating under a Compliance Schedule? Yes No Proposed
3. Is source operating under a Variance Yes No (If Yes, please attach variance information)
4. For permit modification, provide a general description of the proposed permit modification:

IV. SUPPLEMENTAL ATTACHMENTS*: _____

* Means all attachments to the complete application.

**San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A2)**

Company Name Carlsbad Energy Center LLC	District Use Only NEDS # _____ SITE ID # _____
---	---


I. MAJOR SOURCE APPLICABILITY

Check appropriate pollutant(s) for which you are a Major Source under Title V. Applicability is based on potential to emit. If more space is necessary, use additional forms. Please type or print legibly.

POLLUTANT	MAJOR SOURCE THRESHOLD TOTAL EMISSIONS, TPY	(check if appropriate)
VOC	100	<input type="checkbox"/>
PM ₁₀	100	<input type="checkbox"/>
SO ₂	100	<input type="checkbox"/>
NO _x	100 (>50)	<input checked="" type="checkbox"/>
CO	100	<input checked="" type="checkbox"/>
ODC	100	<input type="checkbox"/>
LEAD COMPOUNDS	10	<input type="checkbox"/>
HAZARDOUS AIR POLLUTANTS		
SINGLE HAP	10	<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
COMBINATION HAP	25	<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>
		<input type="checkbox"/>

Attach all necessary calculations to this form as applicable. NOTE: Calculations are only needed if no Emission Inventory is on file with the District

Reference ECMPS ORIS Code 302


Signature of Responsible Official

Paul Mattesich
Print Name of Responsible Official

Plant Manager
Title of Responsible Official

Inventory Year 2018

05/01/2019
Date

(805) 616-5836
Telephone No. of Responsible Official

II. EMISSIONS CALCULATIONS ATTACHED (as needed) Yes No

DISTRICT USE ONLY

Date Application Received: _____ Application # _____

Application Filing Fee: _____ District Received Stamp: _____

Receipt #: _____ Fee Code: _____

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility						Future Effective Date
Equipment Specific Applicable Requirement Description										
50	Visible Emissions			✓						
51	Nuisance			✓						
52	Particulate Matter	Method 5		✓						
53	Specific Contaminants	Method 5		✓						
53.1	Scavenger Plants									
54	Dust and Fumes	Method 5								
58	Incinerator Burning									
59	Control of Waste Disposal – Site Emissions	(e)	(e) & (f)							
60	Circumvention									
61.1	Receiving & Storing VOCs at Bulk Plants & Terminals	(d)	(c)(7)							
61.2	Transfer of VOCs into Mobil Transport Tanks	(c)(10)								
61.3	Transfer of VOCs into Stationary Storage Tanks		(c)(2)(iii)							
61.3.1	Transfer Of Gasoline Into Stationary Underground Storage Tanks (not in the SIP)	(h)	(g)							
61.4	Transfer of VOCs into Vehicle Fuel Tanks									
61.4.1	Transfer Of Gasoline From Stationary Underground Storage Tanks Into Vehicle Fuel Tanks (not in the SIP)	(g)	(f)							
61.5	Visible Emissions Standards for Vapor Control Equip.		VE							
61.7	Spillage & Leakage of VOCs									
61.8	Certification Requirements for Vapor Control Equip.			✓						
62	Sulfur Content of Fuels									
64	Reduction of Animal Matter									
66	Organic Solvents	(p)	(o)							
66.1	Misc. Surface Coating Operations & other Processes Emitting VOC (not in SIP)	(h)	(f)							
67.1	Alternative Emission Control Plans (AECPL)	(c)	(d)							
67.2	Dry Cleaning - Petroleum Solvent	(f)	(e)							
67.3	Metal Parts Coating	(g)	(f)							
67.4	Can & Coil Coating	(g)	(f)							
67.5	Paper, Film and Fabric Coating	(f)	(e)							

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Future Effective Date
67.6	Solvent Cleaning Operation	(f)			
67.6.1	Cold Solvent Cleaning and Stripping Operations	(g)	(f)		
67.7	Cutback & Emulsified Asphalt	(f)	(e)		
67.9	Aerospace Coating Operations	(g)	(f)		
67.10	Kelp Processing and Bio-Polymer Mfg.	(f)	(e)		
67.11	Wood Products Coating Operations (not in SIP)				

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Future Effective Date
67.12	Polyester Resin Operations	(g)	(f)		
67.15	Pharmaceutical & Cosmetic Manufacturing	(e)			
67.16	Graphic Arts Operations	(g)	(f)		
67.17	Open VOC Containers	(e)			
67.18	Marine Coating Operations	(g)	(f)		
67.19	Coating and Printing Inks Mfg. Operations	(g)	(f)		
67.20	Motor Vehicle & Mobile Equipment Refinishing Operations				
67.21	Adhesive Material Application Operations				
67.22	Expandable Polystyrene Foam Products Manufacturing Operations (not in SIP)				
67.24	Bakery Ovens	(f)	(e)		
68	Fuel Burning Equipment - NOx				
69.2	Boilers	(f)	(e) & (g)		
69.3	Stationary Gas Turbine Engines - RACT	(f)	(e) & (g)	✓	
69.3.1	Stationary Gas Turbine Engines - BARCT (not in SIP)	(f)	(e) & (g)	✓	
69.4	Stationary Internal Combustion Engines - RACT	(f)	(e)	✓	
69.4.1	Stationary Internal Combustion Engines - BARCT (not in SIP)	(f)	(e)	✓	
70	Orchard Heaters				

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Future Effective Date
K	Standards of Performance for Storage Vessels for Petroleum Liquids Constructed after June 11, 1973 and Prior to May 19, 1978		260.113		
Ka	Standards of Performance for Storage Vessels for Petroleum Liquids Constructed after May 18, 1978	260.113a	260.115a		
Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	260.113b	260.115b 260.116b		

Subpart

L	Standards of Performance for Secondary Lead Smelters	260.123			
M	Standards of Performance for Secondary Brass and Bronze Ingot Production Plants	260.133			
O	Standards of Performance for Sewage Treatment Plants	260.154	260.153		
DD	Standards of Performance for Grain Elevators	260.303			
EE	Standards of Performance for Surface Coating Metal Furniture	260.313 260.316	260.314 260.315		
GG	Standards of Performance for Stationary Gas Turbines	260.335	260.334		
QQ	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing	260.433 260.435	260.434		
RR	Standards of Performance for the Pressure Sensitive Tape and Label Surface Coating Operations	260.444 260.446	260.445 260.447		
SS	Standard of Performance for the Industrial Surface Coating Large Appliances	260.453 260.456	260.454 260.455		
TT	Standards of Performance for Metal Coil Surface Coating	260.463 260.466	260.464 260.465		
BBB	Standards of Performance for the Rubber Tire Manufacturing Industry	260.543 260.547	260.544 260.545 260.546		
FFF	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing	260.583	260.584 260.585		
JJJ	Standards of Performance for Petroleum Dry Cleaners				

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

Subpart	Facility	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Future Effective Date
N,O,P	Glass Manufacturer; Primary Copper Smelter; Arsenic Trioxide and Metallic Arsenic Production Facilities.				
V	Pumps, Compressors, Pressure Relief Devices, Connections, Valves, Lines, Flanges, Product Accumulator Vessels, etc. in VHAP Service.				
SUBPART	MACT Standards (40 CFR 63)				
F,G,H,I	Amendment: Reopening, Averaging Issue				
L	Coke Ovens				
O	Ethylene Oxide Sterilizers				
Q	Industrial Process Cooling Towers				
R	Gasoline Distribution Facilities				
RULE	RULE DESCRIPTION				

Subpart	Facility	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Future Effective Date
T	Halogenated Solvent Cleaning Degreasing				
X	Secondary Lead Smelters				
Y	Marine Tank Loading/Unloading				
CC	Petroleum Refineries				
DD	Off-Site Waste and Recovery Operations				
EE	Magnetic Tape				
GG	Aerospace (Coatings)				
II	Shipbuilding for Ship Repair (Surface Coating)				
JJ	Wood Furniture Industry (Coatings)				
KK	Printing and Publishing				

**San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
Certification Statement (FORM 1401-I)**

Company Name Carlsbad Energy Center LLC	District Use Only
Facility Address: 4950 Avenida Encinas, Carlsbad, CA 92008	NEDS # _____
	SITE ID # _____

Under penalty of perjury, identify the following: (Read each statement carefully and check each box for confirmation.)

- | | | |
|-------------------------------------|-------------------------------------|--|
| Applicable | Not
Applicable | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <i>Based on information and belief formed after reasonable inquiry, the source(s) identified in this application will continue to comply with the applicable requirement with which the source is in compliance. The applicable requirement(s) with which the source(s) is/are not in compliance is/are identified in Form 1401-L, Schedule of Compliance.</i> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <i>Based on information and belief formed after reasonable inquiry, the source(s) identified in this application will comply with the future-effective applicable requirement(s) on a timely basis.</i> |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <i>Based on information and belief formed after reasonable inquiry, the source(s) identified in the Schedule of Compliance application form that is/are not in compliance with the applicable requirement(s), will comply in accordance with the attached compliance plan schedule.</i> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <i>Based on information and belief formed after reasonable inquiry, information on application forms, referenced documents, all accompanying reports, and other required certifications are true, accurate, and complete.</i> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <i>All fees required by Regulation III, Rule 40 have been paid.</i> |



Signature of Responsible Official

Paul Mattesich

Print Name of Responsible Official

Plant Manager

Title of Responsible Official

05/01/2019

Date

(805) 616-5836

Telephone No. of Responsible Official

San Diego County Air Pollution Control District
 10124 Old Grove Road San Diego CA 92131-1649
 (858) 586-2600 FAX (858) 586-2601

**TITLE V APPLICATION
 Compliance Certification Schedule (FORM 1401-K)**

Company Name Carlsbad Energy Center LLC	District Use Only NEDS # _____ SITE ID # _____
Facility Address: 4950 Avenida Encinas, Carlsbad, CA 92008	

In numerical order, list all sources that have federally enforceable requirements for compliance certification on a more frequent basis than once per year. If more space is required, use additional forms. Please type or print legibly.

Permit No.	Emission Unit Name	Applicable Requirements	Frequency
003480	Emergency diesel engine generator (not installed)	maintain monthly logs and non-resettable engine hour meter	monthly
003481	Emergency fire pump diesel engine	maintain monthly logs and non-resettable engine hour meter	monthly
003482	Unit #6	2.5 ppmv NOx, 4.0 ppmv CO, 2.0 ppmv VOC, 5.0 ppmv NH3	1-clock hour, CEMS
003483	Unit #7	2.5 ppmv NOx, 4.0 ppmv CO, 2.0 ppmv VOC, 5.0 ppmv NH3	1-clock hour, CEMS
003484	Unit #8	2.5 ppmv NOx, 4.0 ppmv CO, 2.0 ppmv VOC, 5.0 ppmv NH3	1-clock hour, CEMS
003485	Unit #9	2.5 ppmv NOx, 4.0 ppmv CO, 2.0 ppmv VOC, 5.0 ppmv NH3	1-clock hour, CEMS
003486	Unit #10	2.5 ppmv NOx, 4.0 ppmv CO, 2.0 ppmv VOC, 5.0 ppmv NH3	1-clock hour, CEMS
003487	Unit #11 (not installed)	2.5 ppmv NOx, 4.0 ppmv CO, 2.0 ppmv VOC, 5.0 ppmv NH3	1-clock hour, CEMS

**San Diego County Air Pollution Control District
 10124 Old Grove Road San Diego CA 92131-1649
 (858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
 Abatement Devices (FORM 1401-M)**

Company Name Carlsbad Energy Center LLC	District Use Only
Facility Address: 4950 Avenida Envinas, Carlsbad, CA 92008	NEDS # _____ SITE ID # _____

LIST OF ABATEMENT DEVICES

In numerical order, list all abatement devices, the abatement device, name or description, and the emission unit or operation abated. If more space is required, use additional forms. Please type or print legibly.

Permit No(s)	Abatement Device Name or Description	Emission Unit(s) or Operation(s) Abated
APCD2014-APP-003482	SCR with water injection for NOx control	Unit #6
APCD2014-APP-003482	Oxidation catalyst for CO/VOC control	Unit #6
APCD2014-APP-003483	SCR with water injection for NOx control	Unit #7
APCD2014-APP-003483	Oxidation catalyst for CO/VOC control	Unit #7
APCD2014-APP-003484	SCR with water injection for NOx control	Unit #8
APCD2014-APP-003484	Oxidation catalyst for CO/VOC control	Unit #8
APCD2014-APP-003485	SCR with water injection for NOx control	Unit #9
APCD2014-APP-003485	Oxidation catalyst for CO/VOC control	Unit #9
APCD2014-APP-003486	SCR with water injection for NOx control	Unit #10
APCD2014-APP-003487	Oxidation catalyst for CO/VOC control	Unit #10
APCD2014-APP-003487	SCR with water injection for NOx control	Unit #11 (not installed)
APCD2014-APP-003487	Oxidation catalyst for CO/VOC control	Unit #11 (not installed)

**San Diego County Air Pollution Control District
 10124 Old Grove Road San Diego CA 92131-1649
 (858) 586-2600 FAX (858) 586-2601**

**TITLE V APPLICATION
 Alternative Operating Scenario (FORM 1401-N)**

Company Name Carlsbad Energy Center LLC	District Use Only
Facility Address: 4950 Avenida Encina, Carlsbad, CA 92008	NEDS # _____ SITE ID # _____

SCENARIO WITH EMISSION CHANGES

Give a title, a brief description, and an emission change. Attach calculations and detailed descriptions of each scenario to this form, using one form for each scenario. **Please type or print legibly.**

Operating Scenario # N/A

TITLE	
DESCRIPTION	
EMISSION CHANGE	

Attach all necessary calculations, detailed descriptions, and proposed terms and conditions to this form.

