UPDATE TO
DEVELOPMENT AND PRODUCTION PLAN AND ENVIRONMENTAL REPORT

CONVERSION OF GROSS PRODUCTION PIPELINE AND PLATFORM POWER RECONFIGURATION

PLATFORM EDITH
OFFSHORE ORANGE COUNTY

Project No. 2402-0381

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LIST OF ACRONYMS

AB	Assembly Bill
AGA	American Gas Associates
API	American Petroleum Institute
AQMP	Air Quality Management Plan
bbl	Barrels
BACT	Best Available Control Technology
BOEM	Bureau of Ocean Energy Management
BPD	Barrels per Day
BSEE	Bureau of Safety and Environmental Enforcement
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Control Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulation
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CZMA	Coastal Zone Management Act
DOCD	Development Operations Coordination Document
DPP	Development and Production Plan
EFH	Essential Fish Habitat
FCAA	Federal Clean Air Act
FESA	Federal Endangered Species Act
GHG	Greenhouse Gas
GFP	Gross Fluid Production

ILI	Internal In-line Inspection
IPCC	Intergovernmental Panel on Climate Change
IPaC	Information for Planning and Consultation
IMT	Incident Management Team
kV	Kilovolts
kWe	Kilowatt Electrical
kWh	Kilowatt hours
LACT	Lease Automatic Custody Transfer
HAPC	Habitat Areas of Particular Concern
HAZWOPER	Hazardous Waste Operations and Emergency Response
MMPA	Marine Mammal Protection Act
MMscf	Million Standard Cubic Feet
MPMS	Manual of Petroleum and Measurement Standards
$MTCO_2E$	Metric Tons of Carbon Dioxide Equivalent
MW	Megawatt
MWh	Megawatt Hours
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NMFS	National Marine Fisheries Service
NO	Nitric Oxide
NOx	Oxides of Nitrogen
NO_2	Nitrogen Dioxide
O_3	Ozone
OCS	Outer Continental Shelf
OFO	Office of Field Operations
O&M Manual	Operations & Maintenance Pipeline Manual
OPD	Office of Production and Development

OSO	Office of Strategic Operations
OSPR	California Office of Spill Prevention and Response
OSRO	On-site Spill Response Organization
OSRP	Oil Spill Response Plan
PHMSA	Pipeline and Hazardous Materials Safety Administration
PM	Particulate Matter
PM_{10}	Particulate Matter with a Diameter of 10 Microns or Less
$PM_{2.5}$	Particulate Matter with a Diameter of 2.5 Microns or Less
PTC	Permit to Construct
PTO	Permit to Operate
ROG	Reactive Organic Compounds
ROV	Remote Operated Vehicle
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
TACs	Toxic Air Contaminants
U.S. EPA	U.S. Environmental Protection Agency
WCD	Worst-Case Discharge
ZE	Zero Emissions

1.0 INTRODUCTION

1.1 PROJECT TITLE

Conversion of Gross Production Pipeline from Platform Eva to Platform Edith and Platform Edith Power Reconfiguration

1.2 PROJECT APPLICANT'S NAME AND ADDRESS

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1.3 PURPOSE AND OBJECTIVES

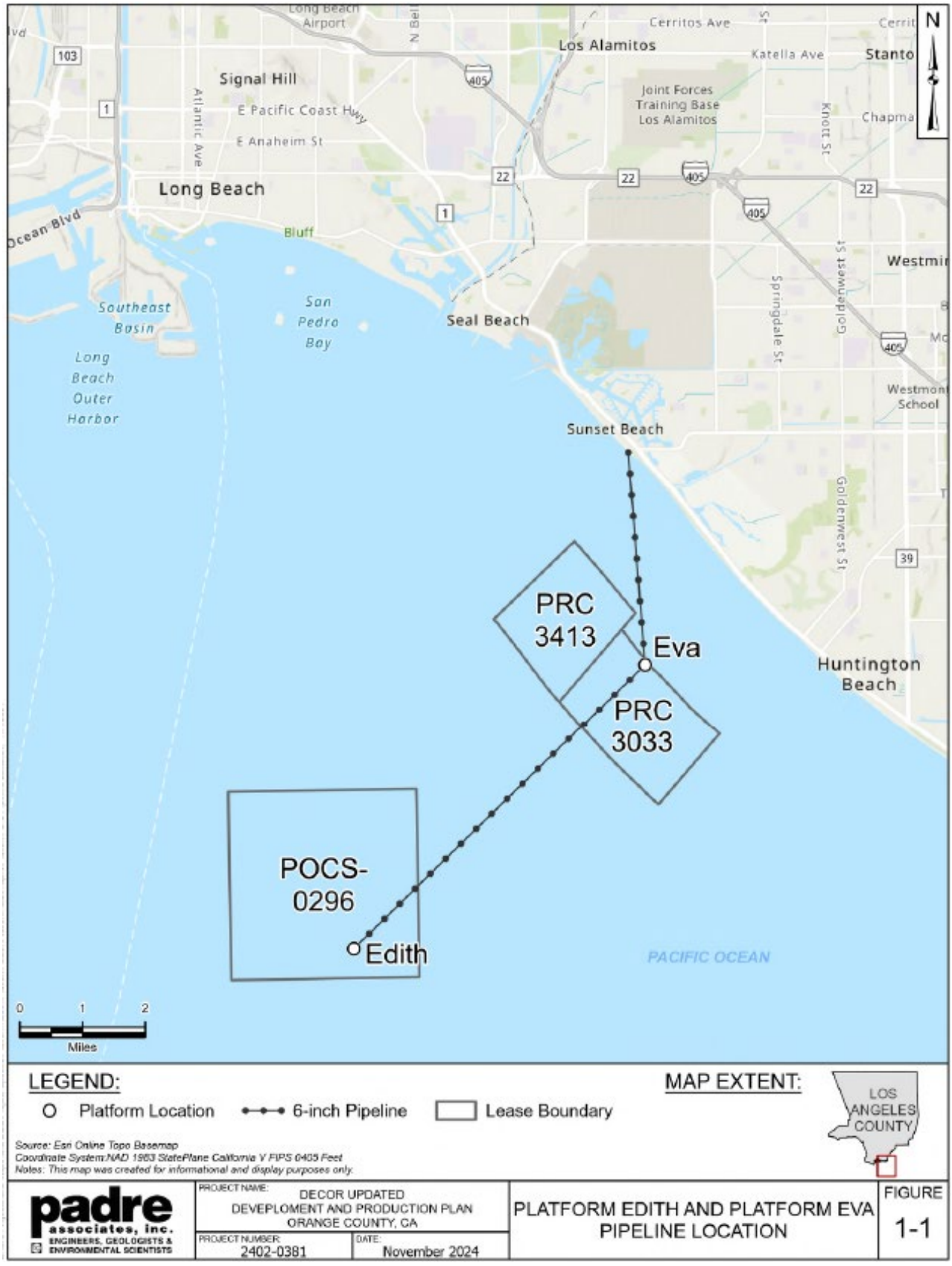
The purpose of this project description and analysis is to update the Platform Edith DPP and associated Environmental Report to include the conversion of the existing 6-inch gas pipeline to transport Gross Fluid Production (GFP) between Platform Eva (State lease PRC 3033) and Platform Edith (OCS-P 0296) (Figure 1-1). This update also addresses the reconfiguration of electrical power generation on Platform Edith. No activities associated with this DPP update require the approval of a license or permit which is not described in the existing approved DPP.

1.4 BACKGROUND

Platform Edith is located within the Beta Unit of the federal Outer Continental Shelf (OCS) lease areas, approximately 8.5 miles southwest of Huntington Beach. Platform Edith's original DPP and Environmental Report was completed by Chevron U.S.A. Inc. in December 1980 (OCS Lease-P 0296), and a Supplemental to the Environmental Report and DPP was completed in April 1982 to incorporate the installation and operation of a subsea natural gas pipeline between Platform Edith and Platform Eva (Chevron 1980 and 1982). This updated Environmental Report for Platform Edith will address the conversion of the gas pipeline to transport GFP and is meant to be read in conjunction with the previous 1980 and 1982 DPP documents.

Originally, Platform Edith received power via a dedicated submarine cable that originated onshore in Orange County. This submarine cable continues to deliver up to 34.5 kilovolts (kV) power to Platform Edith. In 2016, eight natural gas-powered microturbines were installed on Platform Edith in response to reduced demand for gas deliveries to onshore power generation stations and increasing electrical power demand on the platforms. These microturbines generate power from platform produced natural gas that had been previously shipped to shore.

Figure 1-1. Platform Edith to Platform Eva Pipeline Location



1.5 REGULATORY REQUIREMENTS

The pipeline conversion and power reconfiguration Environmental Report follows regulatory requirements pursuant to the Bureau of Ocean Energy Management (BOEM) under 30 CFR 550.285(b) (Requirements for Submittal of Revised and/or Supplemental EPs, DPPs, and DOCDs). A summary of federal regulatory requirements is provided in Table 1.5-1. In addition, the Bureau of Safety and Environmental Enforcement (BSEE), Office of Strategic Operations (OSO) and Office of Production and Development (OPD) have reviewed and approved a request to modify right-of-way (ROW) permit number OCS-P 0455 consistent with this proposal, subject to certain conditions primarily related to removing debris along the pipeline and addressing any pipeline spans.

Table 1.5-1. Summary of Project Regulatory Requirements

Permitting Agency	Anticipated Approvals/Regulatory Requirements
Federal	
BOEM	Title 30 – Mineral Resources Part 550 Oil and Gas and Sulphur Operation in the OCS Approval of Supplemental Environmental Report and DPP NEPA analysis
National Marine Fisheries Service	Section 7 Consultation - Endangered Species Act; Essential Fish Habitat Assessment
U.S. Fish and Wildlife Service	Section 7 Consultation - Endangered Species Act.
South Coast Air Quality Management District (SCAQMD)	Facility Permit to Operate (PTO) 143741. See Appendix A for copies of facility PTO.

2.0 PROJECT DESCRIPTION AND METHODOLOGY

2.1 DESCRIPTION OF EXISTING CONDITIONS

Platform Edith (OCS-P 0296) is in federal waters, while Platform Eva (State lease PRC3033) is in state waters. Both Platform Eva and Platform Edith are operated by DCOR. Since its installation and start of service in 1984, the 6-inch pipeline has been used to transport natural gas from Platform Edith to Platform Eva onward to an eventual onshore sales point and also to transport produced gas from Platform Eva to Platform Edith as fuel for microturbine power generation on Platform Edith.

The 6-inch pipeline has been configured for bi-directional flow, but since 2017, with the closure of the onshore gas sales point, the gas flow has only been from Platform Eva to Platform Edith for use in power generation on Platform Edith. This proposed conversion would change the pipeline's use from gas to GFP. Currently, the GFP from Platform Eva is transported through an 8-inch pipeline to the DCOR-operated Fort Apache Onshore Separation Facility (referred to herein as “Fort Apache”), an existing onshore processing facility used to process oil production from Platform Eva.

As originally constructed, Platform Edith receives power via a dedicated submarine cable that originates onshore in Orange County. This submarine cable delivers 34.5kV power to Platform Edith which is received at the platforms main switchgear (SWGR-1). SWGR-1 then distributes power throughout Platform Edith via several Motor Control Centers (MCC’s) and lesser switchgears (SWGR-2 & SWGR-3) that step down the power to lower voltages and contain breakers for individual components. SWGR-1 also supplies 34.5kV power to nearby Platform Elly via a separate submarine cable.

2.2 PIPELINE INSPECTION AND TESTING RESULTS

The 6-inch pipeline is currently undergoing testing and inspection, and the following items have recently been performed:

- An Internal In-line Inspection (ILI) consisting of an ultra-sonic wall thickness survey was conducted on the 6-inch pipeline in December 2022 using tools from NDT Global. None of the anomalies identified required any regulatory action.
- A certified hydrotest was performed on the 6-inch pipeline using water in March 2023 up to a pressure of 240 psi.
- A subsea inspection survey using a remote-operated vehicle (ROV) was performed in October 2023. None of the findings required any regulatory action.

The BSEE, OSO and OPD have reviewed and approved a request to modify ROW permit number OCS-P 0455 consistent with this proposal, subject to certain conditions primarily related to removing debris along the pipeline and addressing any pipeline spans. These conditions from BSEE OSO would be met before the pipeline can convert from gas to GFP service.

2.3 CONVERSION METHODOLOGY

2.3.1 Pipeline

Prior to conversion of the 6-inch pipeline the gas will be removed (displaced by the liquid) and pass through Platform Edith's gas processing equipment. The gas will ultimately go through Platform Edith's microturbines and used to generate electricity.

The conversion of the 6-inch pipeline would require minor modifications on Platform Edith, including the installation of leak detection meters, Lease Automatic Custody Transfer (LACT) units, and transfer pumps. Existing vessels, separators, tanks, and heaters will be repurposed on Platform Edith to support the conversion. The conversion would not alter the structure of either platform, disturb the seafloor or change the alignment from where the 6-inch pipeline was originally laid.

On Platform Eva, piping tie-ins downstream of Platform Eva's Shipping Pumps PAX-SP1 & 2 and an upgrade of the existing oil pipeline leak detection meter will be made to allow for the GFP from Platform Eva to be transported into the 6-inch pipeline to Platform Edith. On Platform Edith, a new leak detection meter will be installed at the receiving end of the 6-inch pipeline to establish a liquid leak detection system for the pipeline. The leak detection systems for operations of the 6-inch pipeline will be regulated under 49 CFR § 195.444 as promulgated by PHMSA.

Onboard Platform Edith, the GFP from Platform Eva will be processed using existing equipment. The GFP will be heated in the Horizontal Wellstream Heater HBG-002 (E-2) before continuing to three-phase Production Separator MBD-002 (V-2) for dehydration, and a meter which measures both volume and density will be installed in the MBD-002 (V-2) water leg. After dehydration, the Platform Eva oil stream will be pumped through one of two new Platform Eva royalty LACT units. The Platform Eva Royalty LACTs are made of 2", double-case, straight-through, rotary vane-type positive displacement meters and associated standard LACT equipment. The LACT units will conform to API, AGA, and MPMS standards. The LACT equipment will be used to determine the net standard volume of oil deliveries. The LACT Units will be calibrated monthly (not to exceed 42 days) as required by CFR, Title 30, Part 250, Subpart L, Section 1202 and as indicated in CCR Title 2, § 2107.5 (d).

Lastly, two new wet oil Surge Pumps, PBA-TK2A/2B (P-TK2A/2B), will be installed to pump the collected Platform Eva wet oil back to Production Header "B" for reprocessing in Horizontal Wellstream Heater HBG-002 (E-2) and Production Separator MBD-002 (V-2).

2.3.2 Power Generation

With the installation of the onsite microturbines in 2016, the power distribution works the same as prior but is now supplemented with power generated onsite. The microturbines are located on Platform Edith's Drill Deck and convert the onsite natural gas into electricity. The microturbines consist of eight individual 200 electrical kilowatts (kWe) Capstone C200 microturbines (C200 microturbines) arranged into two equal-sized containers designated as C1000 (five C200 microturbines, 1000 kWe) and C600 (three C200 microturbines, 600 kWe). The eight C200 microturbines are currently permitted by the SCAQMD under Permit to Operate (PTOs) G50848 through G50855. The microturbine capacity is thus 1,600 kWe. The C200 microturbines are connected to motor control centers MCC-3 (C600) and MCC-5 (C1000) using new dedicated breakers. The power generated by the microturbines is then available for use

throughout Platform Edith to power various equipment using the prior existing electrical infrastructure. Additional small-footprint power monitoring, protection & control equipment was also installed in the main power building (Power Module) near SWGR-1. An equipment specification sheet for the C200 microturbine is provided in Appendix B.

During normal operation, the eight microturbines do not meet the full power demand of Platform Edith, with the power being automatically supplemented by the existing submarine cable from the shore.

2.4 DOWNSTREAM EFFECTS OF CONVERSION ACTIVITIES

2.4.1 Pipeline

Transporting and processing Platform Eva-produced oil on Platform Edith would allow DCOR to idle Fort Apache, which has become surrounded by high-density urban development. As a result, the conversion would also allow for the idling of an 8-inch pipeline used to transport Platform Eva oil production to Fort Apache and the idling of a 2.5 mile, 6-inch sales oil pipeline that connects Fort Apache to Crimson's oil pipeline transportation system.

2.4.2 Power Generation

Using produced gas for power generation on Platform Edith reduces the need to transport this same produced gas to shore for power generation plants along the Orange County coast and subsequent transmission via power cable back to the platform.

In addition, the hot exhaust gas (waste heat) generated by the C200 microturbines is used to heat the produced water associated with oil production. The produced water is then injected back into the oil reservoir at an elevated temperature, which aids in increasing oil recovery from the formation by raising the temperature, thus improving the viscosity of the oil remaining in the reservoir. The hot exhaust gas is also used for process heating to help separate the produced oil/water emulsion in order to achieve sales quality oil. The use of the hot exhaust gas eliminates the need for additional power to heat air independently on the Platform for oil recovery operations.

2.5 PERSONNEL AND SCHEDULE REQUIREMENTS

2.5.1 Pipeline.

Approximately 15 persons consisting of DCOR personnel and DCOR subcontractors would be involved with the modification and conversion process. Onsite activities would take place over 12-hour shifts for approximately 9 weeks. After modifications and conversions have been made the pipeline will be purged and hydrotested, before the converted system is completely operational. A summary of the modification and conversion schedule is provided in Table 2.5.1 below, a detailed schedule is provided in Appendix C. Crew boat and onshore support would be provided by SoCal Ship Services and other contractors, as needed. Aside from the regularly scheduled crew and supply vessels, no additional support vessels would be required to complete the conversion of the pipeline.

Table 2.5.1 – Pipeline Modification and Conversion Schedule

Activity	Working Days	Start	Finish
Offshore Construction: ▪ *Install Leak Detection on Edith* ▪ *Install Leak Detection on Eva* ▪ *Install new LACT Units* ▪ *Install new Transfer Pumps*	56 ▪ *14* ▪ *14* ▪ *56* ▪ *56*	6/30/25 ▪ *6/30/25* ▪ *6/30/25* ▪ *6/30/25* ▪ *6/30/25*	8/25/25 ▪ *7/14/25* ▪ *7/14/25* ▪ *8/25/25* ▪ *8/25/25*
Pipeline Purging	2	8/25/2025	8/27/2025
Pipeline Hydrotest	2	8/27/2025	8/29/2025
Pipeline in Service	1	8/29/2025	8/30/2025

2.5.2 Power Generation

All equipment is currently in place for the existing 1,600 kWe of turbine capacity and requires no additional personnel or vessel support to function beyond routine emissions testing witnessing.

2.6 WASTE DISPOSAL

2.6.1 Pipeline.

The conversion project will generate very little solid waste but will generate ongoing produced water stream for disposal. No hazards solid or liquid waste will be generated.

Solid waste will consist of one-time construction and annual (or less frequent) tank solids from vessel clean outs. Solids waste will be containerized on Platform Edith, transported to shore and disposed of or recycled in accordance with the Platform's existing waste management procedures. This level of solid waste will not be significantly more than what is currently handled from Platform Edith.

Liquid waste will consist of continuous disposal of Eva's produced water via ocean discharge, under the approved National Pollutant Discharge Elimination System (NPDES) permit. Some amount of produced water will be transported to Platform Edith from Platform Eva in conjunction with the oil, this water will be separated out on Platform Edith then will require disposal. Platform Edith currently discharges 1,500 barrels per day (BPD) of produced water, is permitted for 9,000 BPD of discharge, and the approved DPP considers up to 30,000 BPD of discharge. Eva will send an estimated 3,000 BPD of additional water that will require disposal on Platform Edith via discharge.

[1] NPDES permit, CAG280000, currently allows for 9,000 BPD of produced water to be discharged from Edith. The permit is currently active and has been waiting on readoption by the California Coastal Commission.

2.6.2 Power Generation.

The conversion project will create very little solid waste and no liquid or hazardous waste. Waste would consist of general shipping materials and recyclable metals. Solid waste would be containerized on Platform Edith and disposed of or recycled properly onshore in accordance with the Platform's existing waste management procedures

2.7 PIPELINE WORST-CASE DISCHARGE CALCULATION

Calculations of the Worst-Case Discharge (WCD) volume were conducted for the existing pipeline operations (Platform Eva to Fort Apache) and for the proposed converted pipeline operations (Platform Eva to Platform Edith) (Appendix D). The proposed converted pipeline operations would have a total WCD of 65 and 259 barrels (bbl), as per the BSEE and California Office of Spill Prevention and Response (OSPR) guidelines, respectively. This is a reduction in WCD volumes from 214 bbl (BSEE) and 857 bbl (OSPR) from the current operation of the 8-inch pipeline between Platform Eva and Fort Apache.

2.8 COASTAL ZONE MANAGEMENT ACT CONSISTENCY

The modifications and conversion of the 6-inch pipeline to transport GFP from Platform Eva to Platform Edith and the power reconfiguration, as described above, are consistent with the policies of the Coastal Zone Management Act (CZMA) and California Coastal Zone Management Plan and would be conducted in a manner to ensure conformity with State policies and regulations to protect coastal resources. The operation of the 6-inch gas pipeline remains consistent with the CZMA consistency certification completed in the 1982 Supplemental DPP (Chevron, 1982). In addition, the following section provides an analysis of consistency with other applicable California Coastal Zone Management Plan policies.

Article 4: Marine Environment

Section 30232. Oil and Hazardous Substances Spill. *Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

Assessment: Conversion activities and procedures would include the installation of leak detection meters and DCOR would continue to implement monitoring and spill contingency plans. The conversion of the 6-inch gas pipeline to transport GFP will not increase the spill risk of crude oil or petroleum products into the marine environment. DCOR has completed WCD calculations and found a reduction in the WCD volumes associated with oil produced from Platform Eva due to the utilization of a smaller, existing pipeline. The proposed downstream pipelines the oil will flow through, from Platform Edith to Platform Elly, Platform Elly to shore, are already in service and their WCDs will remain unchanged.

Power reconfiguration activities reduce the need for transportation of natural gas to shore for subsequent power generation. No change in spill risk would result from the use of microturbine power generation on the platform

Findings: The proposed activities are consistent with the policy because engineering and administrative controls will be in place to protect marine resources. In addition, the proposed activities reduce the overall WCD volume from Platform Edith.

Article 7: Industrial Development

Section 30262. Oil and Gas Development (a): *Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:*

(2): *New or expanded facilities related to that development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.*

(7)(A): *All oil produced offshore California shall be transported onshore by pipeline only. The pipelines used to transport this oil shall utilize the best achievable technology to ensure maximum protection of public health and safety and of the integrity and productivity of terrestrial and marine ecosystems.*

(7)(B)*: Once oil produced offshore California is onshore, it shall be transported to processing and refining facilities by pipeline.*

Assessment: The proposed activities do not include an expansion of facilities and would consolidate development by utilizing the existing 6-inch pipeline and processing equipment on Platform Edith, therefore reducing the overall modifications required for the conversion. The proposed activities would also reduce the carbon emissions associated with processing Platform Eva oil production by consolidating the processing and handling of Platform Eva oil production with Platform Edith oil production. The conversion of the 6-inch pipeline would allow DCOR to idle Fort Apache and associated 8-inch and the 2.5 mile, 6-inch sales oil pipeline which connects Fort Apache to Crimson's oil pipeline transportation system situated in a dense urban environment, further reducing carbon emissions.

Power reconfiguration activities reduce the need for transportation of natural gas to shore for subsequent power generation. Power generation will occur at the Platform with supplemental electric power from shore. Overall criteria pollutant emissions will not increase as a result of the reconfiguration of the power generation service, however over all GHG emissions will increase slightly (refer to Section 3.3 and 3.4).

Findings: The proposed activities are consistent with the policy because the minor modifications that are required for the conversion of the pipeline would allow for an overall reduction in processing facilities and would maximize the protection of the environment and public health.

2.9 OPERATION MANAGEMENT PLANS AND IMPACT MINIMIZATION MEASURES

DCOR currently maintains and implements the following management plans and impact minimization measures to protect environmental and public trust resources, including:

- Operations & Maintenance Pipeline Manual (O&M Manual).
- Oil Spill Response Plan (OSRP).
- Coverage with an approved On-site Spill Response Organization (OSRO).
- Leak detection systems on all pipelines carrying liquid hydrocarbons.

- Pipeline inspections including visual underwater surveys using ROVs, performing pressure tests, running ILI tools and tracking conditions of sacrificial coupons, in accordance with regulatory requirements.
- Weekly visual inspections of water quality along pipeline alignment.
- Pipeline maintenance with chemical treatment and cathodic protection to protect against corrosion.
- Perform tabletop spill drills as part of a coordinated Incident Management Team (IMT) and perform equipment deployment spill drills.
- Hazardous Waste Operations and Emergency Response (HAZWOPER) training for all employees who are part of an IMT or respond to a spill.
- Power generation on Platform Edith will be conducted in compliance with the requirements of the PTOs issued by the SCAQMD. PTO inspections will be conducted as required.

3.0 ENVIRONMENTAL REPORT

The proposed conversion and reconfiguration projects and continued operation of Platform Edith would be conducted in compliance with BOEM-approved plans and procedures (1980 Approved DPP). The environmental resources in the vicinity of Platform Edith would not be affected by the proposed conversion project. Routine and ongoing oil and gas operations are assessed in the "Draft Programmatic Environmental Assessment (EA) for Federally Regulated Offshore Oil and Gas Activities in the Southern California Planning Area" (BSEE/BOEM, 2018). The EA provides identified activities and the potential effects on the environment, including Air Quality, Water Quality, Marine Invertebrates, Marine Fish, Sea Turtles, Marine Birds, Marine Mammals, Commercial and Recreational Fishing, and Socioeconomics.

The BOEM EA concludes that while oil and gas operations incrementally contribute to impacts on these resources, such impacts are not expected to result in significant cumulative impacts on these resources. DCOR continues to comply with federal requirements to avoid potential effects in the Southern California Planning Area. In addition, the proposed pipeline conversion or power reconfiguration will add no additional production capacity, increase the risk of an oil spill beyond what was originally permitted and installed, or increase air emissions from ongoing operations.

3.1 ENVIRONMENTAL ANALYSIS

The following sections provide the environmental setting information for Platform Edith and identify potential environmental impacts from the proposed pipeline conversion or power reconfiguration projects. Both activities include measures that will be implemented to minimize these potential impacts. For the purposes of this analysis, all work for the pipeline conversion and power reconfiguration will occur on Platform Edith, and no in-water work will be conducted.

3.1.1 Pipeline

Following the proposed conversion of the pipeline to GFP, Platform Eva's produced oil would be processed on Platform Edith; however, the processing operations would be consistent with DCOR's 1980 and 1982 DPPs for Platform Edith. Therefore, the proposed conversion is expected to have minimal environmental impacts, and resource areas that are ***not*** expected to experience ***any*** adverse effects and are omitted from the following analysis, including Air Quality, Commercial Fishing, Commercial Shipping, Cultural Resources, Geology, Green House Gas (GHG) Emissions, Oceanography, Military Uses, Socioeconomics, and Recreation. The proposed conversion activities would be supported by the existing Platform Edith crew and operations in accordance with the DCOR Operations & O&M Manual.

Resource areas that have the potential to be affected by the proposed pipeline conversion activities include the following:

- Marine Biological Resources
- Water Quality

3.1.2 Power Generation

The installation of the C200 microturbines on Platform Edith will generate electrical power using natural gas produced on-site. Supplemental power will be provided via the existing subsea power cable from shore. No changes in overall power demand will result from this conversion; therefore, these activities are consistent with DCOR's 1980 and 1982 DPPs for Platform Edith.

The proposed power reconfiguration is expected to have minimal environmental impacts, and resource areas that are ***not*** expected to experience ***any*** adverse effects and are omitted from the following analysis, including, Commercial Fishing, Commercial Shipping, Cultural Resources, Geology, Oceanography, Marine Biological Resources, Military Uses, Socioeconomics, Recreation, and Water Quality. The proposed conversion activities would be supported by the existing Platform Edith crew and operations in accordance with the DCOR Operations & O&M Manual.

Resource areas that have the potential to be affected by the proposed pipeline conversion activities include the following:

- Air Quality
- Greenhouse Gas Emissions

3.2 EFFECTED ENVIRONMENT

3.2.1 Marine Biological Resources

Platform Edith and Platform Eva are located within the Southern California Bight on the southern end of the Santa Barbara Channel, which is influenced by the warmer waters of the northern countercurrent. Habitats around Platform Edith include open water, benthic, and subtidal habitats on the platform jacket.

3.2.1.1 Marine Habitats

Open water Habitat

The open water habitat surrounding Platform Edith supports migration and foraging habitat for marine mammals, reptiles, fish and avifauna. The water depth around Platform Edith is approximately 161 feet (49.1 meters) and would support species that are adapted to live at those depths. In addition, the pelagic environment supports a diverse and fundamental population of planktonic species (Refer to Section 3.6.1 in 1982 DPP).

Benthic Habitat

Platform Edith is located in a soft bottom area where polychaete worms, amphipod crustaceans, and mollusks. Brittle stars and sea cucumbers dominate the benthic habitat (Refer to Section 3.6.2 in 1982 DPP). A variety of crab species, including the commercially important rock crabs (*Cancer* spp.), also occur on sandy substrates. In addition, diverse benthic communities also develop around platform bases and pipelines that run along the seafloor. In a study conducted of the OCS benthic habitats, sea anemones, sea urchins, sea stars, and crustaceans (shrimp and crabs) were associated with the pipeline infrastructure (Argonne National Laboratory, 2019).

Subtidal and Platform Habitat

At the water's surface, the platform's jacket provides an artificial habitat that acts as infrastructure for the attachments of typical shallow, rocky reef invertebrate and fish species. Meyer-Gutbrod et al. (2019) found that the white anemone, *Metridium farcimen,* was by far the most commonly observed cnidarian and comprises 97.6 percent of all invertebrates found on the platform's jacket. The gorgonian and soft corals (alcyonacean, *Leptogorgia chilensis* and the scleractinian, *Lophelia pertusa*), are the most commonly occurring corals near the surface and in midwater depths. Corals are usually found along the crossbeams where they are more protected from currents and swell, opposed to the shear vertical faces of the outer piling supports. Vase sponges are the most commonly found sponges along the platform structures and are found in mid-to-deep water ranges between 266 and 1,194 feet (81 and 365 meters) (Meyer-Gutbrod et al., 2019).

Fish densities can be variable between Platforms but tend to be lowest in the shallower depth strata, between 0 to 100 feet (0 to 30 meters) and increase with depth. Midwater habitats serve as nursery grounds for a range of rockfish species including blue (*Sebastes mystinus*), squarespot (*S. hopkinsi*) and widow rockfish (*S. entomelas*) and bocaccio (*S. paucispinis*) (Love et al., 2012). In years with sufficient recruitment, young-of-the-year (YOY) rockfish can occur in substantial numbers around the surface and midwater depths. The platform's presence provides an opportunity for larval fish to settle out into a complex yet suitable habitat that provides refuge from predators and strong currents, as well as attracting a sufficient prey base. Other species that occur include nearshore reef species such as garibaldi (*Hypsypops rubicundus*), blacksmith (*Chromis punctipinnis*), cabezon (*Scorpaenichthys marmoratus*), sheephead (*Semicossyphus pulcher*), and white and sharpnose perches (*Morone americana* and *Phanerodon atripes,* respectively) (Love et al., 2012).

The bottom of Platform Edith is comprised of vertical and horizontal supports; however, unlike the midwater structure, the bottom habitat contains both the structural elements and a seafloor that is covered with fallen marine fouling organisms (shell mound). In some areas, the bottom crossbeam is undercut or covered over, providing a "cave-like" habitat that is not found in the midwaters. In addition, this deep-water habitat consists of random, small crevices and other refuges unique to the seafloor habitats (Love and Nishimoto, 2012).

Essential Fish Habitat

Platform Edith is located in EFH for managed groundfish species as well as the potential foraging or migrating habitat for coastal pelagic species and highly migratory species. Federal regulations recognize three HAPCs: Rock reefs, canopy kelps, and seagrass beds. The water depth and distance from shore preclude the presence of both canopy kelp and seagrass beds HAPCs. In addition, geophysical surveys have not identified any deep-water rocky reef habitats that would qualify as HAPC near Platform Edith.

Regardless, NMFS and BOEM (2019) recognize that oil and gas platforms may serve important EFH functions that enhance the survivorship of juvenile rockfish. While offshore platforms are not designated HAPC, surveys demonstrate that high concentrations of groundfish have been observed in association with these platforms. Studies have found that rockfish are the dominant group of fish around offshore platforms and can comprise between 83 and 89 percent of the total fish diversity (Love et al., 2010 and 2012). Within the midwater nurseries of offshore

platforms, densities of young rockfish have been found to be higher than around most natural reefs (Love et al., 2012). In addition, several species that were formerly listed by the CDFW (i.e., bocaccio and cowcod) are found in all life stages from the midwater to the bottom of the platforms' structures.

3.2.1.2 Marine Birds

Over 2.5 million seabirds may pass through or reside in the Southern California Bight at any one time. The population fluctuates seasonally because the region is located along the Pacific flyway, which is a major migratory route for all bird species that travel from the northwestern United States, Canada, and Alaska to Southern California and Central America. A portion of the Pacific Flyway is located off the coast of California, but the exact location can vary depending on weather.

Few species remain in the area throughout the year since most are non-breeding transients. There is a variety of marine bird species that inhabit or migrate through the open waters of the Project area. The highest at-sea densities are reported to occur near the Channel Islands in January and lowest in the southwest portion of the Southern California Bight (Argonne National Laboratory, 2019). Migrating birds are known to use offshore platforms for nighttime roosting; however, it appears the birds' association with the structures has more to do with the availability of roosting habitat in open water than it does with the lighting on the platforms (Argonne National Laboratory, 2019; Johnson et al., 2011).

Pelagic seabirds generally occur over deeper offshore waters of the Project area. Common pelagic species in the Project area include the Northern fulmar (*Fulmarus glacialis*), sooty shearwater (*Ardenna grisea*), black-vented shearwater (*Puffinus opisthomelas)*, pink-footed shearwater (*P. creatopus*), leach's storm-petrel (*Oceanodroma leucorhoa*), brown pelican (*Pelecanus occidentalis*), cormorants (*Phalacrocorax* spp.), red phalarope (*Phalaropus fulicaria*), red-necked phalarope (*P. lobatus*), and the common murre (*Uria aalge*). Although pelagic species are generally present throughout the year, their abundance varies seasonally. For example, the sooty shearwater and pink-footed shearwaters are most abundant during summer months (Argonne National Laboratory, 2019). Other pelagic migratory species are most numerous from mid-April to early June and from mid-August to mid-October.

3.2.1.3 Marine Mammals

All marine mammals are protected under the 1972 MMPA, and all sea turtles in U.S. waters are listed under the FESA. These laws are overseen by the NMFS. Baleen whales, toothed whales (including dolphins), sea lions (including the California sea lion [*Zalophus californianus]*), harbor seals (such as the Pacific harbor seal [*Phoca vitulina richardsi*]), fur seal (such as the federally endangered Guadalupe fur seal [*Arctocephalus townsendi*]) could occur in the Project area. California sea lions utilize the Platform loading decks as haul-out or resting areas year-round, but there are no documented sea lion rookeries on the OCS Platforms. In addition, common dolphins (*Delphinus* sp.) are known to migrate through the region, sometimes daily, as they move between foraging grounds near the coast.

Disturbing, harassing, injuring, or killing a protected species is prohibited by the MMPA. Table 3.2-1 lists species and their estimated abundance that could be encountered by Project vessels transiting between the Port of Long Beach and the Project sites. Table 3.2-2 details marine wildlife occurrences and distribution in Southern California. Where seasonal differences

occur, individuals may also be found within the area during the off-season and, depending on the species, the numbers of abundant animals present in their off-season may be greater than the numbers of less common animals in their on-season.

3.2.1.4 Sea Turtles

Although rarely encountered, marine turtles occur within waters off the Southern California coast and could potentially occur in the open water habitat around Platform Edith. The four listed sea turtles that may occur within the Project area include the endangered Leatherback turtle (*Dermochelys coriacea*) and Loggerhead turtle (*Caretta caretta*), and the threatened Green turtle (*Chelonia mydas*) and Olive Ridley turtle (*Lepidochelys olivacea*). Populations of marine turtles have been greatly reduced due to overharvesting and loss of nesting sites in coastal areas. Sea turtles breed at sea and the females return to their natal beaches to lay their eggs; however, sea turtles do not nest anywhere along the California coast. In Southern California, coastal power plants discharge warm water that attract and maintain two known colonies of Green sea turtles: In San Diego Bay and in Orange County near the San Gabriel River (Argonne National Laboratory, 2019). Although several occurrences of sea turtles have been documented off the Southern California coast, the likelihood of their occurrence around Platform Edith is considered low.

Table 3.2-1. Marine Wildlife Species of the Southern California Coast

Common Name *Scientific Name*	Minimum Population Estimate (Stock)	Current Population Trend
REPTILES		
Cryptodira*		
Green turtle *Chelonia mydas*	20,112 (Eastern Pacific DPS)	Stable
Leatherback turtle *Dermochelys coriacea*	361 (California)	Decreasing
Loggerhead turtle *Caretta caretta*	7,138 (California)	Decreasing
Olive Ridley turtle *Lepidochelys olivacea*	1.1 million (Eastern Tropical Pacific Distinct Population Segment [DPS])	Decreasing
MAMMALS		
Mysticeti		
Blue whale *Balaenoptera musculus*	1,767 (Eastern North Pacific Stock)	Unable to determine
California gray whale *Eschrichtius robustus*	25,849 (Eastern North Pacific Stock)	Fluctuating annually
Fin whale *Balaenoptera physalus*	7,970 (California/Oregon/Washington Stock)	Increasing off California
Humpback whale *Megaptera novaeangliae*	1,282 (Central America / Southern Mexico - California/Oregon/Washington Stock)	Increasing
	3,185 (Mainland Mexico - California/Oregon/Washington Stock)	Unable to determine
Minke whale *Balaenoptera acutorostrata*	509 (California/Oregon/Washington Stock)	Unable to determine
Northern Pacific right whale *Eubalaena japonica*	26 (Eastern North Pacific Stock)	Unable to determine
Sei whale *Balaenoptera borealis*	374 (Eastern North Pacific Stock)	No long-term trends suggested
Odontoceti		
Baird's beaked whale *Berardius bairdii*	894 (California, Oregon, Washington)	No long-term trend suggested
Common bottlenose dolphin *Tursiops truncatus*	1,255 (California/Oregon/Washington Offshore Stock)	No long-term trend suggested
	346 (California Coastal Stock)	No long-term trend suggested
Cuvier's beaked whale *Ziphius cavirostris*	4,214 (California, Oregon, Washington)	No long-term trend due to rarity
Dall's porpoise *Phocoenoides dalli*	10,286 (California/Oregon/Washington Stock))	Unable to determine
Dwarf sperm whale *Kogia sima*	Unknown (California/Oregon/Washington)	No long-term trend due to rarity
Killer whale *Orcinus orca*	276 (Eastern North Pacific/Offshore Stock)	Stable

Common Name ***Scientific Name***	**Minimum Population Estimate (Stock)**	**Current Population Trend**
	349 (West Coast Transient Stock)	Unable to determine
Long-beaked common dolphin *Delphinus capensis*	69,636 (California Stock)	Unable to determine
Mesoplodont beaked whales *Mesoplodon* spp	1,967 (California, Oregon, Washington)	No long-term trend due to rarity
Northern right whale dolphin *Lissodelphis borealis*	17,024 (California/Oregon/Washington Stock)	No long-term trend suggested
Pacific white-sided dolphin *Lagenorhynchus obliquidens*	29,090 (California/Oregon/Washington Stock)	No long-term trends suggested
Pygmy sperm whale *Kogia breviceps*	1,924 (California/Oregon/Washington Stock)	No long-term trend suggested
Risso's dolphin *Grampus griseus*	4,817 (California/Oregon/Washington)	No long-term trend suggested
Short-beaked common dolphin *Delphinus delphis*	888,971 (California/Oregon/Washington Stock)	Unable to determine
Short-finned pilot whale *Globicephala macrorhynchus*	466 (California/Oregon/Washington Stock)	No long-term trend suggested
Sperm whale *Physeter macrocephalus*	1,270 (California/Oregon/Washington Stock)	No long-term trend suggested
Striped dolphin *Stenella coeruleoalba*	23,448 (California, Oregon, Washington)	No long-term trend suggested
Pinnipedia		
California sea lion *Zalophus californianus*	233,515 (U.S. Stock)	Increasing
Guadalupe fur seal *Arctocephalus townsendi*	31,019 (Mexico Stock; Undetermined in California)	Increasing
Northern fur seal *Callorhinus ursinus*	6,858 (California Stock)	Increasing
Pacific harbor seal *Phoca vitulina richardsi*	27,348 (California Stock)	Increasing

Sources: National Marine Fisheries Service (NMFS) Stock Assessment Reports by Species 2007 through 2022; National Marine Fisheries Service and U.S. Fish and Wildlife Service. 2008, 2007a, 2007b, 2014, and 2020.

* Estimates are based on number of current numbers of nesting females.

Table 3.2-2. Marine Wildlife Species within California and Periods of Occurrence

Family Common Name	Month of Occurrence (1) J	F	M	A	M	J	J	A	S	O	N	D
Mysticeti												
California gray whale												
Blue whale (E)												
Fin whale (E)												
Humpback whale (E)												
Minke whale												
Sei whale (E)												
Northern right whale (E)												
Odontoceti												
Dall's porpoise												
Short-beaked common dolphin												
Long-beaked common dolphin												
Pacific white-sided dolphin												
Risso's dolphin												
Short-finned pilot whale												
Bottlenose dolphin												
Northern right whale dolphin												
Sperm whale (E)												
Dwarf sperm whale												
Pygmy sperm whale												
Baird's beaked whale												
Cuvier's beaked whale												
Mesoplodont beaked whales												
Killer whale (E)												
Pinnipedia												
Guadalupe fur seal (T)												
Northern fur seal(2)												
California sea lion												
Northern elephant seal(3)												
Pacific harbor seal												

Rare with uniform distribution | Not expected to occur | More likely to occur due to seasonal distribution | Present Year Round

Notes:

(E) Federally listed endangered species.

(T) Federally listed threatened species.

(1) Where seasonal differences occur, individuals may also be found in the "off" season. Also, depending on the species, the numbers of abundant animals present in their "off" season may be greater than the numbers of less common animals in their "on" season.

(2) Only a small percent occur over continental shelf (except near San Miguel rookery, May-November).

(3) Common near land during winter breeding season and spring molting season.

3.2.1.5 Special Status Species

Based on the literature review and species lists obtained from USFWS (Information for Planning and Consultation [IPaC] Trust Resource Report) and from NMFS for the offshore area around Platform Edith, a list of federally protected, special-status species that have been reported within the habitats surrounding Platform Edith has been compiled. Special-status species that were considered for potential occurrence in the region are listed in Table 3.2-1. Table 3.2-1 also includes rationale for why certain species were considered unlikely to occur or absent from the habitats around Platform Edith.

An analysis of the likelihood of occurrence for each species was conducted on the basis of species ranges, previous observations, contemporary sightings, and presence of suitable habitat elements. Platform Edith is located outside of the known range of some species, or within the geographic range for a certain species, but suitable habitat, such as nesting, migrating corridors or deep-water habitats are absent from the immediate vicinity.

Table 3.2-3. Federally Listed Marine Species with the Potential to Occur near Platform Edith

Species	Protection Status	Critical Habitat	Preferred Habitat and Occurrence in Project Area
INVERTEBRATES			
White abalone *Haliotis sorenseni*	FE	None designated	Rocky substrates alongside sand channels at depths of 50 to 180 feet Unlikely to Occur; Suitable habitat is not present.
Black abalone *Haliotis cracherodii*	FE	The Platform is not located within Critical Habitat	Intertidal and subtidal habitats from upper intertidal to 20 feet (6 meters) depth between Point Arena, California to Bahia Tortugas, Mexico. Most commonly observed in complex habitats with deep crevices and drift macroalgae. Unlikely to Occur; Suitable habitat is not present.
BIRDS			
Short-tailed albatross *Phoebastria (=Diomedea) albatrus*	FE	None designated	Breeding colony occurs on Torishima Island off Japan. Non-breeding population utilized pelagic habitat along Pacific Rim to Gulf of Alaska. Primarily juveniles will use California coastal waters to feed on squid, crustaceans, and fish. Unlikely to occur. Breeding habitat does not occur. Low potential for juvenile birds to occur in study area during fall and early winter (Argonne National Lab, 2019).

Species	Protection Status	Critical Habitat	Preferred Habitat and Occurrence in Project Area
Marbled murrelet *Brachyramphus marmoratus*	FT	The Platform is not located within Critical Habitat	Nest in old growth forests in San Francisco area and Pacific Northwest. Forage in nearshore marine habitats on pelagic fish and invertebrates. Low likelihood to occur. Potential nearshore foraging habitat present during late summer/fall migration. Nesting habitat is not present.
California least tern *Sterna antillarum browni*	FT	None designated	Breeds on sandy beaches with minimal vegetation close to estuaries and embayments. Nearest breeding colony is located at McGrath Beach and within Port of Long Beach Low likelihood to occur. Potential nearshore foraging habitat present during early spring migration. Nesting habitat is not present.
FISH/ELASOBRANCHS			
Giant manta ray *Manta birostris*	FT	None designated	Worldwide pelagic habitats in tropical, subtropical, and temperate bodies of water with a minimum temperature of 66 degrees Fahrenheit. Within waters under U.S. jurisdiction, the giant manta ray can be found along the east coast as far north as Long Island, New York, within the Gulf of Mexico, and off the coast of the U.S. Virgin Islands, Puerto Rico, Hawaii, and Jarvis Island (NMFS, 2019c). Unlikely to Occur; Platform Edith is outside of species current range.
Oceanic whitetip shark *Carcharhinus longimanus*	FT	None designated	Pelagic species found open ocean and oceanic islands tropical and subtropical seas with water depths greater than 600 feet. Strong preference to remain in shallow, warm, tropical surface waters (NMFS 2018d). Unlikely to Occur; Platform Edith is outside of species current range and lacks preferred habitat.
Scalloped hammerhead shark *Sphyrna lewini*	FE	None designated	Highly migratory species that occurs in coastal warm temperate waters and tropical seas over continental shelves as well as deep waters (Miller et al., 2014). Unlikely to Occur; Platform Edith is outside of species current range and lacks preferred habitat.

Species	Protection Status	Critical Habitat	Preferred Habitat and Occurrence in Project Area
Steelhead (Southern CA ESU) *Oncorhynchus mykiss*	FE	The Platform is not located within Critical Habitat	Spawn in coastal watersheds and their offspring rear and mature in freshwater or estuarine habitats before migrating out to sea. Steelhead require cool, flowing water, and access to the ocean with adequate water depths, cover and marine vegetation to provide shelter. Historically reported in San Gabriel and Santa Ana Rivers. Possible in nearshore habitats; low potential to occur during emigration from freshwater habitat.
Steelhead (South-Central California Coast ESU) *Oncorhynchus mykiss*	FE	The Platform is not located within Critical Habitat	Marine habitat similar to Southern California steelhead. This DPS includes naturally spawned anadromous steelhead originating below natural and manmade impassable barriers from the Pajaro River to (but not including) the Santa Maria River. Unlikely to occur due to distance of Platform Edith from natal rivers.
Green sturgeon (southern DPS)	FE	The Platform is not located within Critical Habitat	Found in near shore marine within depths of less than 60 fathoms (360 feet) and estuarine environments from Alaska to Baja California, Mexico. Marine habitats consist of hard substrates, boulders and bedrock in depths of 65 to 200 feet (Huff et al, 2011). Unlikely to occur because the offshore Platform Edith lacks suitable green sturgeon refuge and foraging marine habitats.
MAMMALS			
Gray whale (Western North Pacific DPS) (*Eschrichtius robustus*)	FE	None Designated	Summer, fall feeding grounds at Sakhalin Island, Russia. Portions of the Sakhalin population migrate east across the Pacific and south along the west coast of North America to Mexico. Another portion is presumed to migrate southwest to Korea, Japan, and China. Possible; peak abundance December through February and March through May during southward and northward migrations, respectively.
Humpback whale (Central America DPS) *Megaptera novaeangliae*	FE	The Platform is not located within Critical Habitat	Whales that breed along the Pacific coast of Costa Rica, Panama, Guatemala, El Salvador, Honduras and Nicaragua and feed offshore California and Oregon. Possible; peak abundance April through September in Southern California Bight.

Species	Protection Status	Critical Habitat	Preferred Habitat and Occurrence in Project Area
Humpback whale (Mexico DPS) *Megaptera novaeangliae*	FT	The Platform is not located within Critical Habitat	Whales that breed along the Pacific coast of mainland Mexico, the Baja California Peninsula and the Revillagigedo Islands and feed from California to the Aleutian Islands. Possible; peak abundance April through September in Southern California Bight.

3.2.1.6 Impact Assessment

The conversion of the production pipeline from gas to GFP is not expected to have any direct impact on marine habitats or wildlife. Indirect impacts from the proposed conversion of the pipeline include potential for incidental release of hydrocarbons in the marine environment.

Oil Spill Potential. The unintentional release of hydrocarbons into the marine environment from the 6-inch pipeline could occur due to pipeline rupture or a major accident (Refer to Section 5.0 in 1982 DPP). A hydrocarbon release could result in potential impacts to the marine biota, particularly avifauna and early life stage forms of fish and invertebrates, which are sensitive to hydrocarbon chemicals. As detailed in Section 2.6, calculations of the WCD volume were conducted for the existing pipeline operations (Platform Eva to Fort Apache) and for the proposed converted pipeline operations (Platform Eva to Platform Edith) (Appendix D). The proposed converted pipeline operations would ***reduce*** the overall WCD volumes from 179 bbl to 65 bbl (BSEE calculation) and from 738 bbl to 259 bbl (OSPR calculation) from the current operation of the 8-inch pipeline between Platform Eva and Fort Apache. Therefore, due to the overall reduction in volume of hydrocarbons being transported within the 6-inch pipeline, the potential impact if an incidental release did occur would be reduced in comparison to the existing risk potential. In addition, the pipeline would operate at low pressure (75 psi), so if an accident were to occur hydrocarbons would leak slowly. If such a rupture occurred, the new leak detection meters and existing systems would automatically shut-in the pipeline on Platform Edith and Platform Eva.

Platform-specific oil spill contingency and response plans such as the OSRP have been developed and will be used to direct the containment and recovery of any incidental spills into the marine waters.

Per Section C1.1 of the OSRP: The equipment used for uncontained spills (those reaching the ocean) into the Santa Barbara Channel or the San Pedro Channel from any DCOR platform or associated pipeline will be provided by Marine Spill Response Corporation (MSRC). MSRC's resources in the Santa Barbara Channel and from the Long Beach area may be activated to support a larger scale incident. STARs contractor personnel and equipment could also supplement the MSRC capability locally. If necessary, MSRC could also cascade resources from its San Francisco operations, or other MSRC locations throughout the country. MSRC resources and/or STARs contractor personnel and equipment may be utilized for shoreline protection.

Due to the use of established leak detection systems and contingency plans, impacts are not likely to affect marine wildlife. The proposed conversion project would result in a reduction of the overall WCD from the pipeline and a lesser impact if an incidental release should occur.

3.2.2 Water Quality

3.2.2.1 Regional Setting

Platform Edith is located in the San Pedro Basin within San Pedro Bay. San Pedro Bay receives water from the watersheds of Southern Los Angeles County and Orange County. Water quality in San Pedro Bay is generally good but has much higher pollutant inputs from the adjacent metropolitan and industrial areas. Major rivers discharging into the San Pedro Bay include the San Gabriel/Los Angeles River and the Santa Ana River. Four smaller rivers discharge into the San Pedro Basin downstream of the Santa Ana River: Aliso Creek, Salt Creek, San Juan Creek, and San Mateo Creek. Although there have been improvements in water treatment technologies and efficiency, the general increase in runoff due to the hardening of surface areas due to the construction of roads, buildings, and other impervious surfaces has contributed to pollutant inputs from runoff (non-point-source pollution) (Argonne Laboratory, 2019).

Point source pollution in the San Pedro Bay includes wastewater discharge from Los Angeles County Sanitation District Joint Water Pollution Control Plant and the Orange County Sanitation District. Other inputs include chemical runoff from harbors, dumping and dredging activities, vessel traffic, military activities and industrial activities, including hydrocarbon releases from oil production. Offshore oil and gas operations are relatively small contributors of pollution but contribute relatively higher amounts of hydrocarbon pollutants than other anthropogenic sources (Argonne Laboratory, 2019). Offshore discharges from oil and gas operations include cooling water, produced water, sanitary waste, fire control system test water, and miscellaneous other liquids. Of these, produced water represents the greatest discharge of petroleum-related chemical constituents.

Ambient suspended sediments (turbidity) levels in the region are created by wind, swell, and currents. Turbidity concentrations nearshore have been measured as about 1 milligram per liter (mg/L), with higher levels seen along the bottom in areas of sand and after large storms. The highest turbidity levels correspond to periods of highest upwelling, primary production, and river runoff. Lower turbidity levels (0.5 mg/L) usually occur offshore in deeper waters (Argonne Laboratory, 2019). The level of turbidity controls the depth of light penetration (euphotic zone), which provides important biological indicators for midwater and surface-dwelling species.

3.2.2.2 Impact Analysis

The proposed conversion project and processing on Platform Edith would continue to operate within the scope of methods described in the 1980 DPP and would not change the content of produced water discharge. Produced water from the Project is currently discharged in accordance with the NPDES General Permit for Offshore Oil and Gas Exploration, Development, and Production Operations for Southern California (Permit No. CAG 280000) that was granted continued permit coverage by the U.S. EPA in 2019. DCOR remains in compliance by performing weekly, monthly and annual fluid sampling and testing by an independent U.S. EPA approved laboratory.

The unintentional release of hydrocarbons into the marine environment from the 6-inch pipeline could occur due to pipeline rupture or a major accident (Refer to Section 5.0 in 1982 DPP). A hydrocarbon release could result in potential impacts to water quality which could affect biological, commercial, recreational and socioeconomic resources. As detailed in Section 2.6 and 3.2.1.6 above, DCOR completed the WCD calculations which resulted in a reduction in the overall

WCD volumes. The worst-case discharge is calculated by using the method identified under 49 CFR 194.105(b)(1) – the pipeline's maximum release time in hours, plus the maximum shutdown response time in hours, multiplied by the maximum flow rate expressed in barrels per hour, plus the largest pipeline drainage volume after shutdown of the pipeline section. In addition, the conversion of the 6-inch pipeline would allow for the idling of the 8-inch pipeline used to transport Platform Eva oil production to the Fort Apache Onshore Facility and the idling of a 2.5 mile, 6-inch sales oil pipeline, which connects Fort Apache to Crimson's oil pipeline transportation system, the downstream effects of which would reduce the risk of an incidental release and potential impacts to water quality in the area which has become surrounded by high density urban development.

DCOR will continue to maintain and update the OSRP for operations on Platform Edith. The DCOR OSRP identifies the personnel and role of each person who will be called upon in a response, as well as identifies the approved ORSO. The OSRP establishes a protocol for notification of any oil spill greater than one barrel and includes checklists for immediate response to identify and control the source of the spill, initiate clean-up efforts and conduct risk assessment. The OSRP also includes lists of spill clean-up equipment that are located on the platform as well as the platform's vessel support. Additionally, DCOR conducts annual training on the OSRP procedures and HAZWOPER and regular "Emergency Drill" training with its offshore personnel.

There is no expected change to water quality due to an increase in turbidity. The proposed conversion project would not disturb the seafloor or create any indirect increases in turbidity levels; therefore, no impact to water quality is expected to occur.

3.2.3 Air Quality

3.2.3.1 Regional Overview

The proposed Project is located within the South Coast Air Basin (SCAB) offshore from Northern Orange County and falls under the jurisdiction of the SCAQMD. The Project area has a Mediterranean climate that is characterized by mild winters and warm, dry summers. The influence of the Pacific Ocean causes mild temperatures year-round along the coast, while inland areas experience a wider range of temperatures.

The regional climate within the vicinity of the Project area is dominated by a strong and persistent high-pressure system, the Pacific High, which frequently lies off the Pacific Coast. The Pacific High shifts northward or southward in response to seasonal changes or the presence of cyclonic storms. In its usual position to the west, the Pacific High produces an elevated temperature inversion.

An inversion is characterized by a layer of warmer air above cooler air near the ground surface. Normally, air temperatures decrease with altitude, however in an inversion the temperature of the air increases with altitude. The inversion acts like a lid on the cooler air mass near the ground, preventing pollutants in the lower air mass from dispersing upward beyond the inversion "lid." This phenomenon results in higher concentrations of pollutants trapped below the inversion. This weather pattern is intensified by mountain ranges that surround the SCAB which constrain the horizontal movement of air and inhibit the dispersion of air pollutants out of the region.

Airflow plays a significant role in the dispersal of pollutants. Local winds are normally controlled by the location of the Pacific High. Typical wind speeds in the area are generally light, which is another factor that contributes to higher concentrations of pollutants because low wind speeds minimize dispersion of pollutants. The sea breeze comes from the southwest, which blows air from the coastline eastward and inland. This weather pattern tends to blow pollution from the coastline inland, which then becomes trapped in the inversion discussed above, contributing to the poor air quality in the SCAB. When the Pacific High weakens, a Santa Ana condition can develop with air traveling westward toward the coast from the warmer desert regions eastward. Santa Ana winds can flush the basin and inversion of pollution, however stagnant air often occurs following a Santa Ana condition, causing a buildup of pollutants offshore.

Air quality in Southern California has improved remarkably since the 1970s, which is a direct result of implementing the comprehensive, multiyear Air Quality Management Plan (AQMP) to reduce air pollution from all sources. While air quality has dramatically improved over the years, the basin still exceeds Federal public health standards for both ozone (O_3) and particulate matter (PM) and experiences some of the worst air pollution in the nation (SCAQMD, 2022). The SCAB's air pollution problems are a consequence of the combination of emissions from the nation's second largest urban area, meteorological conditions adverse to the dispersion of the emissions, and mountainous terrain surrounding the basin that traps pollutants as they are pushed inland with the sea breeze (SCAQMD, 2022).

3.2.3.2 Criteria Pollutants

Criteria air pollutants are those contaminants for which ambient air quality standards have been established for the protection of public health and welfare. Criteria pollutants include ozone [O_3], oxides of nitrogen [NO_X], sulfur dioxide [SO_2], reactive organic compounds [ROG], carbon monoxide [CO], and particulate matter [PM] and Toxic Air Contaminants (TACs).

Ozone (O_3). O_3 is formed in the atmosphere through complex photochemical reactions involving NO_X, ROG (also known as reactive organic compounds), and sunlight that occur over several hours. Since O_3 is not emitted directly into the atmosphere but is formed as a result of photochemical reactions, it is classified as a secondary or regional pollutant. These O_3-forming reactions take time; therefore, peak ozone levels are often found downwind of major source areas. O_3 is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at the greatest risk from ozone exposure.

Carbon Monoxide (CO). CO is primarily formed through the incomplete combustion of organic fuels. Higher CO values are generally measured during winter when dispersion is limited by morning surface inversions. Seasonal and diurnal variations in meteorological conditions lead to lower values in summer and in the afternoon. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues, which can cause health effects to those with cardiovascular disease and can affect mental alertness and vision.

Nitric Oxide (NO). NO is a colorless gas formed during combustion processes which rapidly oxidizes to form nitrogen dioxide (NO_2), a brownish gas. The highest nitrogen dioxide values are generally measured in urbanized areas with heavy traffic. Exposure to NO_2 may

increase the potential for respiratory infections in children and cause difficulty in breathing even among healthy persons and especially among asthmatics.

Sulfur Dioxide (SO_2). SO_2 is a colorless, reactive gas that is produced from burning sulfur-containing fuels, such as coal and oil, as well as by other industrial processes. Generally, the highest concentrations of SO_2 are found near large industrial sources. SO_2 is a respiratory irritant that can cause the narrowing of the airways, leading to wheezing and shortness of breath. Long-term exposure to SO_2 can cause respiratory illness and aggravate the existing cardiovascular disease.

Particulate Matter (PM). Ambient air quality standards have been set for particulate matter with a diameter of 10 microns or less (PM_{10}) and particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$). Both consist of different types of particles suspended in the air, such as metal, soot, smoke, dust and fine mineral particles. The particles' toxicity and chemical activity can vary, depending on the source. The primary source of PM_{10} emissions appears to be from the soil via road use, construction, agriculture, and natural windblown dust; other sources include sea salt, combustion processes (such as those in gasoline or diesel vehicles), and wood burning. Primary sources of $PM_{2.5}$ emissions come from construction sites, wood stoves, fireplaces, and diesel truck exhaust. Particulate matter is a health concern because when inhaled it can cause permanent lung damage. While both sizes of particulates can be dangerous when inhaled, $PM_{2.5}$ tends to be more damaging because it remains in the lungs.

3.2.3.3 Toxic Air Contaminants

Over 800 substances have been identified by the U.S. Environmental Protection Agency (U.S. EPA) and the California Air Resources Control Board (CARB) that are emitted into the air and may adversely affect human health. Due to the cancer risk associated with exposure to diesel particulate matter (DPM), this substance has been targeted for risk reduction by the CARB.

The combustion of diesel fuel in truck engines (as well as other internal combustion engines) produces exhaust containing a number of compounds that have been identified as hazardous air pollutants by U.S. EPA, and as TACs by the CARB. DPM from diesel exhaust has been identified as a TAC. The Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES IV) indicates DPM is a major contributor to cancer risk in southern California associated with TACs, accounting on average for 68 percent of the total risk (South Coast Air Quality Management District [SCAQMD], 2015). NO_x and DPM are currently controlled through the use of selective catalytic reduction control systems and diesel exhaust fluid, respectively on all new diesel trucks and heavy equipment. In addition, fleets of older trucks are required to phase in the installation of exhaust particulate filters. CARB maintains the Portable Equipment Registration Program (PERP). The program is a voluntary program that allows an equipment owner to register portable equipment such as drilling rigs and generators with CARB. Each air district determines the type of portable equipment that needs to obtain a permit. An owner or operator of portable equipment that needs a permit for the operation of the equipment at a given location may also register in PERP in lieu of having to get a permit from the air districts for operation at other locations.

Sources of TACs in the Project region include mobile sources (motor vehicles, trains, equipment) and stationary sources such as dry cleaners (perchloroethylene emissions) and gasoline dispensing stations (vapor emissions of benzene and other components of gasoline).

3.2.3.4 Regulatory Setting

Federal, State, and local regulations, laws, and policies pertaining to air quality relevant to the Project are included below.

Federal and State

The U.S. EPA has jurisdiction under the Federal Clean Air Act (FCAA) and its amendments. The CARB has jurisdiction under the California Clean Air Act (CCAA) and California Health and Safety Code. The U.S. EPA and CARB classify an area as attainment, unclassified, or non-attainment, depending on whether the monitored ambient air quality data show compliance, insufficient data to determine compliance, or non-compliance with the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), respectively.

The U.S. EPA established NAAQS to protect public health (primary standards) and welfare (secondary standards). Air basins are classified by the U.S. EPA as in "attainment" or "non-attainment" based on meeting the NAAQS. The CARB established the more stringent CAAQS, which also requires air basins to be designated as in "attainment" or "non-attainment" based on meeting the CAAQS. NAAQS and CAAQS have been established for O_3, CO, NO_2, SO_2, suspended particulate matter (e.g., dust) and lead (refer to Table 3.2-4). In addition, California has standards for H_2S, sulfates and visibility-reducing particles. Table 3.2-4 lists applicable ambient air quality standards.

Table 3.2-4. Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard	Federal Standard
Ozone (O_3)	1-Hour	0.09 ppm	--
Ozone (O_3)	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide (CO)	1-Hour	20 ppm	35 ppm
Carbon Monoxide (CO)	8-Hour	9.0 ppm	9 ppm
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm
Nitrogen Dioxide (NO_2)	1-Hour	0.18 ppm	100 ppb
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	--	0.030 ppm
Sulfur Dioxide (SO_2)	24-Hour	0.04 ppm	0.14 ppm
Sulfur Dioxide (SO_2)	3-Hour	--	0.5 ppm (secondary)
Sulfur Dioxide (SO_2)	1-Hour	0.25 ppm	75 ppb
Respirable Particulate Matter (PM_{10})	Annual Geometric Mean	20 µg/m^3	--
Respirable Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	150 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	Annual Geometric Mean	12 µg/m^3	12.0 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	--	35 µg/m^3

Pollutant	Averaging Time	California Standard	Federal Standard
Hydrogen Sulfide (H_2S)	1-Hour	0.03 ppm	--
Vinyl Chloride	24 Hour	0.01 ppm	--
Sulfates	24 Hour	25 µg/m^3	--
Lead	30 Day Average	1.5 µg/m^3	--
Lead	Calendar Quarter	--	1.5 µg/m^3
Lead	Rolling 3-Month Average	--	0.15 µg/m^3
Visibility Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer – visibility of 10 miles or more due to particles when relative humidity is less than 70 percent	--

Notes: µg/m3 – micrograms per cubic meter
ppm – parts per million
Source: CARB 2024

Air Quality Regulation and Planning. The SCAQMD shares responsibility with the CARB for ensuring that all State and Federal ambient air quality standards are attained within the SCAB. The Project area is located in the jurisdiction of the SCAQMD. The table below summarizes the current federal and state air quality attainment status within the SCAB.

Table 3.2-5. Federal and State Air Quality Attainment Status Within the SCAB

Criteria Pollutant	Standard	Status
1-Hour and 8-Hour O^3	NAASQS	**Extreme Non-attainment**
1-Hour and 8-Hour O^3	CAAQS	**Non-attainment**
1-Hour and 8-Hour CO	NAASQS	Attainment
1-Hour and 8-Hour CO	NAASQS	Attainment
1-Hour NO_2	NAASQS	Unclassifiable/Attainment
1-Hour NO_2	CAAQS	Attainment
Annual NO_2	NAASQS	Attainment
Annual NO_2	CAAQS	Attainment
1 Hour and 24 Hour SO_2	NAASQS	Attainment
24 Hour $PM_{2.5}$	NAASQS	**Serious Non-attainment**
Annual $PM_{2.5}$	NAASQS	**Serious Non-attainment**
Annual $PM_{2.5}$	CAAQS	**Non-attainment**
24 Hour PM_{10}	NAASQS	Attainment
24 Hour PM_{10}	CAAQS	**Non-attainment**
Annual PM_{10}	CAAQS	**Non-attainment**
3-Month Lead	NAASQS	Partial Attainment

Criteria Pollutant	Standard	Status
1-Hour H_2S	CAAQS	Attainment
24-Hour Sulfates	CAAQS	Attainment
24-Hour Vinyl Chloride	CAAQS	Attainment

Source: SCAQMD 2022
Unclassified status indicates that there is insufficient data to determine whether an air basin or county is in attainment or non-attainment.

The FCAA requires that the State prepare a State Implementation Plan (SIP) that outlines a plan for the State to reach attainment of NAAQS that the State is not in attainment. The 2022 State SIP Strategy Statewide planning document identifies the strategies and controls under State authority that are needed to reduce emissions to reduce ground-level ozone, otherwise known as smog. These measures are needed across the State of California for areas to meet the federal 70 parts per billion (ppb) 8-hour ozone standard (70 ppb O_3 standard) set by the U.S. EPA in 2015.

In response to past SIP documents and the 2022 SIP, the SCAQMD and the Southern California Association of Governments (SCAG) developed Air Quality Management Plans to address attainment of NAAQS and CAAQS. The SCAQMD has developed AQMPS in 2003, 2007, 2012, 2016 and 2022. The 2022 AQMP focused on attaining the 2015 8-hour ozone The 2015 8-hour ozone NAAQS is the most stringent standard to date. Current ozone levels in the SCAB are very high, the SCAQMD indicates that in order to meet the NAAQS substantial emissions reductions above and beyond current programs will be required. In the SCAB the SCAQMD indicates that mobile sources such as heavy-duty trucks, marine vessels, airplanes, locomotives, and construction equipment account for 80 percent of NO_x emissions. In 2037, the SCAQMD projects that approximately 184 tons per day of NO_x will be emitted in the SCAB. This is known as the “baseline” and includes the implementation of existing regulations and programs, not including the actions proposed in 2022 AQMP. In order to meet the NAAQS, the amount of NO_x that can be emitted into the atmosphere is 60 tons per day and is known as the “carrying capacity.” This means that NO_x needs to be reduced by about 67 percent beyond the current 2037 baseline and about 83 percent below current levels. To achieve this the 2022 AQMP requires widespread adoption of zero emissions (ZE) technologies across all mobile sectors and stationary sources. Low NO_x technologies will also need to play a significant role for some areas where ZE technology is not ready or commercially available. These lower emissions technologies will also assist with attainment of other air quality standards with earlier deadlines.

Local

At the local level, the SCAQMD regulates stationary sources of air pollution within the SCAB.

SCAQMD Rules and Regulations. The following is a summary of the SCAQMD rules and regulations that may be applicable to the Project:

Regulation II – Permits

- **Rule 201 – Permit to Construct (PTC)** - A person shall not build, erect, install, alter or replace any equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce or control the

issuance of air contaminants without first obtaining written authorization for such construction from the SCAQMD.

- **Rule 203 – PTO** - A person shall not operate or use any equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants, or the use of which may reduce or control the issuance of air contaminants, without first obtaining a written permit to operate from the SCAQMD or except as provided in Rule 202

Regulation IV - Prohibitions

- **Rule 402 – Nuisance** – A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403 – Fugitive Dust** - The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

Regulation XIII - New Source Review

Rule 1301 – General Requirements – The purpose of this rule is to set forth pre-construction review requirements for new, modified, or relocated facilities, to ensure that the operation of such facilities do not interfere with progress in attainment of the NAASQS, and that future economic growth within the SCAQMD is not unnecessarily restricted. The specific air quality goal of this regulation is to achieve no net increases from new or modified permitted sources of nonattainment air

- contaminants or their precursors. Any equipment registered pursuant to Rule 2100 - Registration of Portable Equipment shall be exempt from Regulation XIII.
- **Rule 1302 – Definitions:**
    - **Best Available Control Technology (BACT).** BACTs are the most stringent emission limitation or control technique which can be achieved and is approved by the U.S. EPA or SCAQMD.
    - **Emission Reduction Credits (ERCs).** ERCs are records of verified reductions in emissions that facilities can apply for and obtain when a facility is either shut down or equipment is modified in a way that reduces emissions below what would normally be required under SCAQMD rules. ERCs can be used by a facility or sold to facilities that need emissions offsets.
    - **Facility**. Any source or group of sources or other air contaminant-emitting activities which are located on one or more contiguous properties within the SCAQMD, in actual physical contact or separated solely by a public roadway or other public right-of-way and are owned or operated by the same person (or by persons under common control.

- **Major Polluting Facility**. Any facility located in the SCAB which emits or has the potential to emit the following amounts or more.

Table 3.2-6. Major Polluting Facility Thresholds

Pollutant/Precursor	(tons/year)
NO_x	10
ROG	10
SO_x	70
PM_{10}	70
CO	50

- **Rule 1303 – Requirements**
  - The SCAQMD will deny a PTC for any new or modified source which results in a net emission increase of any nonattainment air contaminant at a facility, unless each of the following requirements is met:
    1. **Modeling.** The applicant substantiates with modeling that the new facility or modification will not cause a violation or make significantly worse an existing violation of any CAAQS or NAASQS at any receptor location in the SCAQMD.
    2. **Emission Offsets**. Unless exempt from offsets requirements emission increases shall be offset by either ERCs approved, Short-Term Credits (STCs) and Specific VOC ERCs.
    3. **Sensitive Zone Requirements.** Unless credits are obtained from the Priority Reserve, facilities located in the SCAB are subject to the Sensitive Zone requirements, specified in California Health and Safety Code Section 40410.5 which require credits to be obtained from the zone a facility is located in. The Project area is located in Zone 1
    4. Facility Compliance. The subject facility must be in compliance with all applicable rules and regulations of the SCAQMD.
    5. **Major Polluting Facilities.** any new major polluting facility or major modification at an existing major polluting facility shall comply with the following requirements. The Project is not a Major Polluting Facility

SCAQMD Air Quality Significance Thresholds. The SCAQMD's California Environmental Quality Act (CEQA) Air Quality Handbook (SCAQMD, 1993) includes significance thresholds for short-term projects (construction) and long-term projects (operational) air pollutant emissions (Table 3.2-7).

Table 3.2-7. SCAQMD Air Quality Thresholds of Significance

Pollutant/Precursor	Construction Emissions (pounds/day)	Operational Emissions (pounds/day)
NO_x	100	55
ROG	75	55
CO	550	550
PM_{10}	150	150
$PM_{2.5}$	55	150
SO_x	150	150

Source: SCAQMD, 2008

3.2.3.5 Impact Assessment

Methodology, Assumptions and Project Emissions Estimates

The construction phase of the project would be completed by current maintenance personnel and DCOR subcontractors. No additional marine vessel trips would be needed for personnel or equipment deliveries; therefore, the construction phase would not generate additional criteria pollutant emissions beyond that of the current operations.

The operational phase of the project for the purposes of this DPP update consists of the currently installed eight C200 microturbines. The total potential yearly power output of the eight C200 microturbines is approximately 14,016 megawatts (MW) (refer to Table 3.2-8). Historically, power utilized by Platform Edith was obtained via a 34.5kV submarine cable from power local onshore gas-powered electrical power stations. The C200 microturbines supplement the power received from shore.

Table 3.2-8. Microturbine Specifications and Potential Total Power Output Summary

Equipment	Total Power Rating (kWe)	Total Potential Power Generated (MWh)	Total Potential Fuel Consumption (MMscf/year)
Eight C200 Microturbines	1,600	14,016	142

Notes: MWh – Megwatt hours
MMscf – Million Standard Cubic Feet

Padre completed criteria pollutant emission estimates for the following:

- Daily and yearly maximum potential emissions from the eight C200 microturbines (1,600 kWe combined) operating 24-hours per day for 365 days (refer to Tables 3.2-9 and 3.2-10).
- Daily maximum emissions from standard natural gas fired turbines rated at 1,600 kWe operating 24-hours per day (refer to Table 3.2-11).

- Estimated yearly actual emissions generated by the currently operating eight C200 microturbines between 2017 and May 2024 (refer to Table 3.2-12).

Criteria pollutant emissions associated with the eight C200 microturbines and standard natural gas powered turbines were estimated by Padre using emissions factors developed or obtained from source testing (AE, 2019)(CMS, 2023), manufacture provided data (U.S. EPA, 2015), CARB's California Emissions Estimator Model (CalEEMod) User's Guide, Appendix G, Default Data Tables (CAPCOA, 2022) and AP-42, Compilation of Air Pollutant Emissions Factors from Stationary Sources (US EPA, 2000). Criteria pollutant emissions estimation tables are provided in Appendix E.

Table 3.2-9. Estimated Daily Operational Emissions Eight C200 Microturbines

Work Task	Units	NO_x	ROG	CO	PM_{10}	$PM_{2.5}$	SO_2
Operations	lbs/day	7.48	3.36	5.23	2.61	2.61	0.233
SCAQMD Significance Threshold (lbs per day)		**55**	**55**	**550**	**150**	**55**	**150**
Exceed Thresholds?		**No**	**No**	**No**	**No**	**No**	**No**

Table 3.2-10 Estimated Yealy Operational Emissions – Eight C200 Microturbines

Work Task	Units	NO_x	ROG	CO	PM_{10}	$PM_{2.5}$	SO_2
Operations	Tons	1.36	0.61	0.95	0.476	0.042	1.36

Emissions resulting from the use of the eight C200 microturbines will not exceed the established SCAQMD air quality daily threshold for any criteria pollutant therefore would not interfere with the attainment of the O_3, PM_{10} or $PM_{2.5}$ NAASQS or CAAQS in the SCAB. The South Coast Air Basin is in non-attainment for national and state standards for O^3, PM_{10} and $PM_{2.5}$.

Table 3.2-11. Estimated Operational Emissions Comparison

Pollutant	Eight C200 Microturbines Totaling 1,600 kWe Emissions (lbs per day)	Standard Natural Gas Turbines Totaling – 1,600 kWe Emissions (lbs per day)	SCAQMD Threshold (lbs per day)	Emissions Change (lbs per day)
NO_X	7.48	127	55	**-119**
ROG	3.36	0.831	55	2.52
CO	5.23	32.4	550	**-27.2**
PM_{10}	2.61	2.61	150	0.000
$PM_{2.5}$	2.61	2.61	150	0.000
SO_2	0.233	1.34	150	**-1.11**

Based on a comparison of the estimated emissions, the use of the eight C200 microturbines over the use of power generated from an onshore natural gas-powered standard turbine powered electrical generation station would potentially reduce operational emissions of NOx, CO and SO_2 emissions by approximately 119 pounds per day, 27.2 pounds per day and 1.11 pounds per day, respectively. (refer to Table 3.2-11). Over a year this would result in an emissions reduction of 43.5 tons of NOx, 9.93 tons of CO and 0.406 tons of SO_2. ROG emissions would increase slightly by 2.52 lbs/day or 0.921 tons per year and PM_{10} and $PM_{2.5}$ emissions would not change.

The emissions estimates summarized above assume that the eight C200 microturbines will operate 24-hours per day 365 days per year (8,760 hours per year), actual operation of the currently installed eight C200 microturbines between 2017 and 2023 averaged approximately 43% percent of the year or approximately 3,794 hours per year. While there is no way to accurately predict the actual number of hours that the eight C200 microturbines will operate in the future on a yearly basis, it is likely that they will not operate 24 hours per day 365 days per year. Total power generation and estimated emissions for the currently installed eight C200 microturbines between 2017 and 2024 are provided in Table 3.2.12 below.

Table 3.2-12. Estimated Emissions Eight C200 Microturbines between 2017 and May 2024

Year	Power Generated (MWh)	Power Generation Capacity Used (%)	NO_x (tons)	ROG (tons)	CO (tons)	PM_{10} (tons)	$PM_{2.5}$ (tons)	SO_2 (tons)
2017	8,825	63.0%	0.859	0.386	0.601	0.300	0.300	0.085
2018	7,873	56.2%	0.766	0.344	0.536	0.268	0.268	0.027
2019	9,231	65.9%	0.899	0.403	0.628	0.314	0.314	0.024
2020	8,202	58.5%	0.799	0.358	0.558	0.279	0.279	0.028
2021	6,712	47.9%	0.653	0.293	0.457	0.228	0.228	0.025
2022	18.8	0.1%	0.002	0.001	0.001	0.001	0.001	0.020
2023	1,633	11.7%	0.159	0.071	0.111	0.056	0.056	0.0001
2024*	1,056	7.5%	0.103	0.046	0.072	0.036	0.036	0.005
Average**	**6,071**	**43.3%**	**0.53**	**0.238**	**0.370**	**0.185**	**0.185**	**0.016**

Notes: * - Through May 2024.
** - Average does not include 2024 power or emissions.

Based on a review of total estimated potential criteria pollutants generated by the eight microturbines and the estimated actual criteria pollutants generated by the eight microturbines the Project is not expected to cause a negative impact on air quality.

3.2.4 Greenhouse Gas Emissions

Greenhouse Gases (GHGs), defined as any gas that absorbs infrared radiation in the atmosphere, include, but are not limited to, water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorocarbons. These GHGs trap and build up heat in the atmosphere near the earth's surface, commonly known as the Greenhouse Effect. The atmosphere and the

oceans are reaching their capacity to absorb CO_2 and other GHGs, leading to significant global climate change in the future. Unlike criteria pollutants and TACs, which are pollutants of regional and local concern, GHGs and climate change are a local, regional, and global issue. There is widespread international scientific consensus that human-caused increases in GHGs have and will continue to contribute to climate change, although there is uncertainty concerning the magnitude and rate of warming.

Climate change is having and will continue to have widespread impacts on California's environment, water supply, energy consumption, public health, and economy. Many impacts have already occurred, including increased fires, floods, severe storms, and heat waves (CGOPR, 2018). Documented effects of climate change in California include increased average, maximum, and minimum temperatures; decreased spring runoff to the Sacramento River; shrinking glaciers in the Sierra Nevada; sea-level rise at the Golden Gate Bridge and San Francisco Bay; warmer temperatures in Lake Tahoe, Mono Lake, and other major lakes; and plant and animal species found at changed elevations (CGOPR, 2018).

According to the Intergovernmental Panel on Climate Change (IPCC), the concentration of CO_2, the primary GHG, has increased from approximately 280 parts per million (ppm) in pre-industrial times (Fifth Assessment Report) to well over 410 ppm in 2021 (Sixth Assessment Report) (IPCC, 2014 and IPCC, 2021). CO_2 concentrations as of 2019 are increasing about 1.9 ppm/year; present CO_2 concentrations are higher than any time in at least the last 2 million years. CO_2 is used as a reference gas for climate change. To account for different GHG global warming potentials for other gases, emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, if the CO_2 global warming potential is set at a reference value of 1, CH_4 has a warming potential of 27.9 (i.e., 1 ton of methane has the same warming potential as 27.9 tons of CO2 [IPCC, 2021]), while nitrous oxide has a warming potential of 273.

To meet both the statewide 2020 GHG reduction target that required California to reduce its total statewide GHG emissions to 1990 levels by 2020, (Health & Safety. Code, § 38550), the 2030 goal of 40 percent below 1990 levels (Executive Order S-30-15) and the 2050 goal of 80 percent below 1990 levels (Executive Order S-3-05), not only must projects contribute to slowing the increase in GHG emissions, but projects should contribute to reducing the State's GHG output. In order to reach California's GHG reduction targets, per capita emissions would need to be reduced by slightly less than five percent each year from 2020 to 2030, with continued reductions through 2050.

3.2.4.1 Regulatory Setting

Federal, State, and local regulations, laws, and policies pertaining to greenhouse gas emissions relevant to the Project are included below.

Federal and State

Assembly Bill 32, California Global Warming Solutions Act. Assembly Bill (AB) 32 a statewide GHG emissions reduction to 1990 levels by 2020. AB-32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and established a statewide GHG emissions cap. AB 32 authorized CARB to adopt market-based compliance mechanisms, such as the Cap-and-Trade system.

In 2008 and 2014, CARB approved the Scoping Plan and the first update to the Scoping Plan, respectively. In 2016, the California Legislature passed Senate Bill (SB) 32, which established a 2030 GHG emissions reduction target of 40 percent below 1990 levels. In response to SB 32 and the companion legislation of AB 197, CARB approved the 2017 Scoping Plan Update: The Strategy for Achieving California's 2030 GHG Target in November 2017. The 2017 Scoping Plan drew from the previous plans to present strategies to reach California's 2030 GHG reduction target.

Assembly Bill 1279, The California Climate Crisis Act. AB 1279 was approved by the governor and added to Section 38562.2 to the California Health and Safety Code in late 2022. AB 1279 set state policy to achieve the following:

- Net zero greenhouse gas emissions as soon as possible, but no later than 2045 and maintain net negative greenhouse gas emissions thereafter; and
- Statewide anthropogenic greenhouse gas emissions are reduced to at least 85 percent below 1990 levels by 2045.

In December 2022 CARB approved the 2022 Scoping Plan 2022 to layout a path to achieve targets directed by Assembly Bill 1279.

Mandatory GHG Reporting Regulations. AB 32 sets the requirement for oil and gas sources to report their GHG emissions if their combustion or process emissions exceed 10,000 metric tons of CO_2E ($MTCO_2E$) per year or if stationary combustion, process, fugitive, and vented emissions are 25,000 $MTCO_2E$ per year or greater.

Project Cap-and-Trade Compliance Obligation Emissions. Project GHG emissions that could be a compliance obligation for the Project under the Cap-and-Trade program include emissions from the following:

- Natural gas production and supply, and
- Natural gas combustion.

GHG emissions from natural gas combustion associated with the Project's proposed additional operational activities would not contribute to the Project's Cap-and-Trade Program GHG compliance obligation as these emissions would not exceed 25,000 $MTCO_2E$ per year.

Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities. The Greenhouse Gas Emissions Standards for Crude Oil and Natural Gas Facilities (California Oil/Gas GHG Regulation) adopted by CARB in March 2017 and amended in June 2023, addresses fugitive and vented emissions from new and existing oil and gas facilities. This regulation covers GHG emissions, primarily CH_4, from production, gathering and boosting stations, and processing as well as natural gas storage and transmission compressor stations. The regulation defines vented emissions as intentional and fugitive as unintentional releases of GHGs by processes at oil and gas facilities in the following sectors:

- Onshore and offshore crude oil or natural gas production;
- Crude oil, condensate and produced water separation and storage;
- Natural gas underground storage;

- Natural gas gathering and boosting stations;
- Natural gas processing plants; and
- Natural gas transmission compressor stations.

Since this Project does not involve an expansion of natural gas production operations, only minor modifications to pipelines and monitoring system there would be no additional emissions related to the above processes.

Local

The SCAQMD has a significance threshold of 10,000 $MTCO_2E$/year emissions per year for industrial projects (SCAQMD, 2008).

3.2.4.2 Impact Assessment

Methodology, Assumptions and Project Emissions Estimates

The construction phase of the project would be completed by current maintenance personnel and no additional marine vessel trips would be needed for personnel or equipment deliveries; therefore, the construction phase would not generate additional GHG emissions beyond that of the current operations.

The operational phase of the project for the purposes of this DPP update consists of the currently installed eight C200 microturbines with a total combined rating of 1,600 kWe. The total potential yearly power output of the eight C200 microturbines is approximately 14,016 MW (refer to Table 3.3-7 in Section 3.3).

Padre completed GHG emission estimates for the following:

- Yearly maximum potential emissions from the eight C200 microturbines (1,600 KW combined) operating 24-hours per day for 365 days (refer to Tables 3.2-13 and 3.2-14).
- Yearly maximum emissions from standard natural gas fired turbines rated at 1,600 KW operating 24 hours per day for 365 days (refer to Table 3.2-14).
- Estimated yearly actual emissions generated by the currently operating eight microturbines between 2017 and May 2024 (refer to Table 3.2-15).

GHG emissions associated with the eight C200 microturbines and standard natural gas fired turbines were estimated by Padre using manufacture provided data (U.S. EPA, 2015) and CAPCOA's CalEEMod Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Appendix G, Default Data Tables (CAPCOA, 2022). GHG emissions estimation tables are provided in Appendix E.

Table 3.2-13 Estimated Yealy Operational Emissions Eight 200 kWe C200 Microturbines

Work Task	Units	N_2O	CH_4	CO_2	$MTCO_2E$
Operations	Tons	0.002	0.747	10,491	9,537
SCAQMD Significance Threshold (metric tons/year)		--	--	--	10,000
Exceed Thresholds?		--	--	--	**No**

GHG emissions resulting from the operation of the eight C200 microturbines for 24-hours per day for 365 days (9,537 $MTCO_2E$) would not exceed the established SCAQMD yearly GHG threshold.

Table 3.2-14. Estimated Operational Emissions Comparison

Pollutant	Eight C200 Microturbines Totaling 1,600 kWe Emissions (tons per year)	Standard Natural Gas Turbines Totaling – 1,600 kWe Emissions (tons per year)	SCAQMD Threshold (tons per year)	Emissions Change (tons per year)
N_2O	0.002	0.217	--	**-0.215**
CH_4	0.747	0.621	--	0.126
CO_2	10,491	7,940	--	2,479
$MTCO_2E$	9,537	7,272	10,000	2,265

Based on a comparison of the estimated emissions, the use of the 8 C200 microturbines over the use of power generated from an onshore natural gas-powered standard turbine powered electrical generation station could potentially increase operational emissions of overall GHG emissions by approximately 2,265 $MTCO_2E$ per year (refer to Table 3.2-14).

The emissions estimates summarized above assume that the eight C200 microturbines will operate 24 hours per day 365 days per year (8,760 hours per year). The actual operation of the currently installed eight C200 microturbines between 2017 and 2023 averaged approximately 43% percent of the year or approximately 3,794 hours per year. While there is no way to accurately predict the actual number of hours that the proposed eight C200 microturbines will operate in the future on a yearly basis, it is likely that they will not operate 24 hours per day, 365 days per year. Total power generation and estimated GHG emissions for the currently installed eight C200 microturbines between 2017 and 2024 are provided in Table 3.2.15 below.

Table 3.2-15. Estimated Emissions Eight C200 Microturbines between 2017 and May 2024

Year	Power Generated (MWh)	Power Generation Capacity Used (%)	N_2O (tons)	CH_4 (tons)	CO_2 (tons)	$MTCO_2E$ (tons)
2017	8,825	63.0%	0.001	0.471	6,606	6,005
2018	7,873	56.2%	0.001	0.420	5,893	5,357
2019	9,231	65.9%	0.001	0.492	6,910	6,281
2020	8,202	58.5%	0.001	0.437	6,139	5,581
2021	6,712	47.9%	0.001	0.358	5,024	4,567
2022	18.8	0.1%	0.000002	0.0010	14.0	12.8
2023	1,633	11.7%	0.0002	0.087	1,223	1,111
2024*	1,056	7.5%	0.0001	0.056	791	719
Average**	**6,071**	**43.3%**	**0.001**	**0.290**	**4,075**	**4,131**

Notes: * - Through May 2024.
** - Average does not include 2024 power or emissions.

The average GHG emissions of the current eight microturbines over the last seven years was approximately 4,131 $MTCO_2E$ per year utilizing 43% of the microturbines power generation capacity. The resulting GHG emissions from the continued use of the eight C200 microturbines would be approximately 4,129 $MTCO_2E$ per year if they are operated at a similar yearly percentage they were operated between 2017 and 2023

Based on the results of this GHG analysis, Project GHG emissions are not expected to have a negative impact on global climate change.

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APPENDIX A

DCOR LLC Facility Permit to Operate

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE

DCOR LLC
OFFSHORE PLATFORM EDITH OCS P-0296
HUNTINGTON BEACH, CA 92649

NOTICE

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

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

Wayne Nastri
Executive Officer

By
For Jason Aspell
Deputy Executive Officer
Engineering and Permitting

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

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Facility ID: 143741
Revision #: 27
Date: January 01, 2025

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DCOR LLC

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FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NOx RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NOx emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin (month/year)	Year End	Zone	NOx RTC Initially Allocated	NOx RTC[1] Holding as of 01/01/2025 (pounds)	Non-Tradable[2] Non-Usable RTCs (pounds)
1/2023	12/2023	Coastal	20409	5508	0
1/2024	12/2024	Coastal	20409	8017	0
1/2025	12/2025	Coastal	20409	8017	0
1/2026	12/2026	Coastal	20409	8017	0
1/2027	12/2027	Coastal	20409	8017	0
1/2028	12/2028	Coastal	20409	8017	0
1/2029	12/2029	Coastal	20409	8017	0
1/2030	12/2030	Coastal	20409	8017	0
1/2031	12/2031	Coastal	20409	8017	0
1/2032	12/2032	Coastal	20409	8017	0
1/2033	12/2033	Coastal	20409	8017	0
1/2034	12/2034	Coastal	20409	8017	0
1/2035	12/2035	Coastal	20409	8017	0
1/2036	12/2036	Coastal	20409	8017	0
1/2037	12/2037	Coastal	20409	8017	0
1/2038	12/2038	Coastal	20409	8017	0
1/2039	12/2039	Coastal	20409	8017	0

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.

2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of NOx RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. Total NOx emission shall not exceed such annual allocations unless the operator obtains RTCs corresponding to the facility's increased emissions in compliance with Rules 2005 and 2007.

The level of Starting Allocation plus Non-Tradable Credits used to determine compliance with Rule 2005(c)(4) and applicability of Rule 2005(e) - Trading Zone Restrictions is listed on the last page of this Section.

The following table lists the annual allocations that were issued to this facility and the amounts of RTCs held by this facility on the day of printing this Section.

RECLAIM POLLUTANT ANNUAL ALLOCATION (POUNDS)

Year Begin (month/year)	Year End (month/year)	Zone	NOx RTC Initially Allocated	NOx RTC[1] Holding as of 01/01/2025 (pounds)	Non-Tradable[2] Non-Usable RTCs (pounds)
1/2040	12/2040	Coastal	20409	8017	0

Footnotes:

1. This number may change due to pending trades, emissions reported under Quarterly Certification of Emissions Report (QCER) and Annual Permit Emission Program (APEP) Report required pursuant to Rule 2004, or deductions made pursuant to Rule 2010(b). The most recent total RTC information can be obtained from the District's RTC Listing.

2. The use of such credits is subject to restrictions set forth in paragraph (f)(1) of Rule 2002.

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

The annual allocation of RECLAIM Trading Credits (RTCs) for this facility is calculated pursuant to Rule 2002. If the facility submits a permit application to increase in an annual allocation to a level greater than the facility's starting Allocation plus Non-Tradable credits as listed below, the application will be evaluated for compliance with Rule 2005 (c)(4). Rule 2005 (e) - Trading Zone Restrictions applies if an annual allocation is increased to a level greater than the facility's Starting Allocation plus Non-Tradable Credits:

Year Begin (month/year)	Year End (month/year)	Zone	NOx RTC Starting Allocation (pounds)	Non-Tradable Credits(NTC) (pounds)
1/1994	12/1994	Coastal	28240	0

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

October 25, 2024

Ms. Heather Carreno
Regulatory Compliance Coordinator
DCOR, LLC.
1000 Town Center Drive, Suite 600
Oxnard, CA 93030

Dear Ms. Carreno

SUBJECT: RECLAIM Facility Permit, ID. No: 143741

Find attached the revised Title Page, Table of Contents, and Section D of your RECLAIM Facility Permit. The revised sections reflect the approval of the RECLAIM Facility Permit Revision for the following equipment.

Equipment	Appl. No.	Device No.	Process	Permit Type
Emergency Fire Pump	642607	D72	3	PO

Review the attached sections carefully. Insert the enclosed sections into your RECLAIM Facility Permit and discard the earlier version. If you determine that there are administrative errors in your permit, please notify Kraig Morris at 909.396.3279 or kmorris@aqmd.gov within 30 days of the receipt of your permit.

Very truly yours,

George Illes
Senior Air Quality Engineering Manager
Operations Team
Engineering and Permitting

GI:MFN:KM
Enclosure
c: Kevin Orellana, Compliance

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE

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Wayne Nastri
Executive Officer

By FOR
Jason Aspell
Deputy Executive Officer
Engineering and Permitting

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

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Facility ID: 143741
Revision #: 26
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DCOR LLC

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FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: CRUDE OIL/WATER/GAS SEPARATION					
OIL/GAS/WATER SEPARATOR, V-2, 335 BBL; DIAMETER: 10 FT ; LENGTH: 50 FT A/N: 441347	D2	C31			A63.1, E57.1
VESSEL, DEHYDRATION, V-3, CRUDE OIL, 700 BARREL CAPACITY, LENGTH: 50 FT ; DIAMETER: 10 FT A/N: 441347	D3	C28			A63.1, E57.1
VESSEL, DEHYDRATION, V-4, CRUDE OIL, 700 BARREL CAPACITY A/N: 441347	D4	C28			A63.1, E57.1
VESSEL, SEPARATOR, V-5, 40 BARREL CAPACITY, LENGTH: 12 FT ; DIAMETER: 3 FT A/N: 441347	D5	C31			A63.1, E57.1
VESSEL, SEPARATOR, V-6, 40 BARREL CAPACITY, LENGTH: 12 FT ; DIAMETER: 3 FT A/N: 441347	D6	C31			A63.1, E57.1
VESSEL, SEPARATOR, V-7, 40 BARREL CAPACITY, LENGTH: 12 FT ; DIAMETER: 3 FT A/N: 441347	D7	C31			A63.1, E57.1
VESSEL, SEPARATOR, V-8, 40 BARREL CAPACITY, LENGTH: 12 FT ; DIAMETER: 3 FT A/N: 441347	D8	C31			A63.1, E57.1
VESSEL, SEPARATOR, V-9, 40 BARREL CAPACITY, LENGTH: 12 FT ; DIAMETER: 3 FT A/N: 441347	D9	C31			A63.1, E57.1
TANK, HOLDING, TK-13, DRY OIL, 360 BBL; WIDTH: 8 FT ; HEIGHT: 14 FT ; LENGTH: 18 FT A/N: 441347	D11	C28			A63.1, E57.1, E127.1

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

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: CRUDE OIL/WATER/GAS SEPARATION					
VESSEL, SEPARATOR, V-27, 85 BARREL CAPACITY, LENGTH: 20 FT ; DIAMETER: 5 FT 6 IN A/N: 441347	D12				A63.1, E57.1
VESSEL, CLEAN-UP, TK-2, 380 BARREL CAPACITY, WIDTH: 14 FT ; HEIGHT: 14 FT ; LENGTH: 14 FT A/N: 441347	D13	C28			A63.1, E57.1, E127.1
Process 2: WASTEWATER DECK DRAIN					
TANK, HOLDING, TK-8, 320 BBL; WIDTH: 10 FT ; HEIGHT: 12 FT ; LENGTH: 15 FT A/N: 441343	D14				E57.1, E127.1
TANK, HOLDING, TK-9, WASTE WATER, 380 BBL; WIDTH: 12 FT ; HEIGHT: 12 FT ; LENGTH: 15 FT A/N: 441343	D15				E57.1, E127.1
TANK, HOLDING, DECK DRAIN RECIRCULATION, 125 BBL; WIDTH: 10 FT ; HEIGHT: 7 FT ; LENGTH: 10 FT A/N: 441343	D16				E57.1
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, DIESEL FUEL, GENERAL MOTORS, MODEL CAT D379, 640 HP WITH A/N: 441341 GENERATOR, 440 KW	D17		NOX: PROCESS UNIT**	**NOX**: 469 LBS/1000 GAL DIESEL (1) ; **PM**: (9)	A63.8, C1.1, C177.1, D12.1, E114.1, E162.1

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

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

FACILITY PERMIT TO OPERATE
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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
TURBINE, MICROTURBINE UNIT NO. 1, CAPSTONE, MODEL C200 WITH EXHAUST GAS HEAT EXCHANGER, 2.28 MMBTU/HR A/N: 587678	D52		NOX: PROCESS UNIT**	**CO**: 40 PPMV FIELD GAS (4) ; **NOX**: 9 PPMV FIELD GAS (4) ; **NOX**: 9 PPMV FIELD GAS (3) ; **VOC**: 7 PPMV FIELD GAS (4)	A195.4, A195.5, A195.6, D12.4, D29.4, D90.1, E193.1, H23.1, H23.4, K40.2
TURBINE, MICROTURBINE UNIT NO. 2, CAPSTONE, MODEL C200 WITH EXHAUST GAS HEAT EXCHANGER, 2.28 MMBTU/HR A/N: 587681	D53		NOX: PROCESS UNIT**	**CO**: 40 PPMV FIELD GAS (4) ; **NOX**: 9 PPMV FIELD GAS (4) ; **NOX**: 9 PPMV FIELD GAS (3) ; **VOC**: 7 PPMV FIELD GAS (4)	A195.4, A195.5, A195.6, D12.4, D29.4, D90.1, E193.1, H23.1, H23.4, K40.2
TURBINE, MICROTURBINE UNIT NO. 3, CAPSTONE, MODEL C200 WITH EXHAUST GAS HEAT EXCHANGER, 2.28 MMBTU/HR A/N: 587682	D54		NOX: PROCESS UNIT**	**CO**: 40 PPMV FIELD GAS (4) ; **NOX**: 9 PPMV FIELD GAS (4) ; **NOX**: 9 PPMV FIELD GAS (3) ; **VOC**: 7 PPMV FIELD GAS (4)	A195.4, A195.5, A195.6, D12.4, D29.4, D90.1, E193.1, H23.1, H23.4, K40.2
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, DIESEL FUEL, GENERAL MOTORS, MODEL CAT 3406TA, WITH AFTERCOOLER, TURBOCHARGER, 335 BHP WITH A/N: 441338 PUMP	D18		NOX: PROCESS UNIT**	**NOX**: 469 LBS/1000 GAL DIESEL (1) ; **PM**: (9)	A63.9, C1.1, C177.1, D12.1, E114.1, E162.1

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
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** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, PC-5600, DIESEL FUEL, DETROIT DIESEL, MODEL 8V92TAC, WITH CO CATALYST, DRIVING THE SOUTH CRANE, WITH AFTERCOOLER, TURBOCHARGER, 450 BHP A/N: 550845	D20		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) ; **NOX**: 469 LBS/1000 GAL DIESEL (1) ; **PM**: (9) ; **ROG**: 250 PPMV (5)	A63.4, C1.2, C177.1, D12.1, D28.1, E114.1, H23.5
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, PC-3800, DIESEL FUEL, DETROIT DIESEL, MODEL 8V92TAC, WITH CO CATALYST. DRIVING THE NORTH CRANE, WITH AFTERCOOLER, TURBOCHARGER, 450 BHP A/N: 550844	D21		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) ; **NOX**: 469 LBS/1000 GAL DIESEL (1) ; **PM**: (9) ; **ROG**: 250 PPMV (5)	A63.4, C1.2, C177.1, D12.1, D28.1, E114.1, H23.5
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, FOUR CYCLE INLINE, 6 CYLINDERS, DIESEL FUEL, JOHN DEERE ENGINE, MODEL 6090HFC47A, CLARKE FIRE PUMP, MODEL JW6H-UFADJ0, WITH AFTERCOOLER, TURBOCHARGER, 350 BHP WITH A/N: 642607 PUMP	D72		NOX: PROCESS UNIT**	**CO**: 2.6 GRAM/BHP-HR DIESEL (4) ; **NHMC + NOX**: 3 GRAM/BHP-HR DIESEL (4) ; **NOX**: 469 LBS/1000 GAL DIESEL (1) ; **PM**: 0.15 GRAM/BHP-HR DIESEL (4)	C1.4, D12.1, E114.1, E162.1, E193.2, E193.3, E448.2, H23.6, I297.14, K67.2
Process 4: EXTERNAL COMBUSTION					

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

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 4: EXTERNAL COMBUSTION					
HEATER, M-30, PROCESS GAS, 2 MMBTU/HR WITH A/N: 441328 VESSEL, V-26, HEAT MEDIUM EXPANSION, LENGTH: 19 FT ; DIAMETER: 8 FT	D22		NOX: PROCESS UNIT**	**CO**: 2000 PPMV (5) ; **NOX**: 130 LBS/MMSCF PROCESS GAS (1) ; **PM**: (9) ; **PM**: 0.1 GRAINS/SCF (5)	A63.7
Process 6: EMERGENCY/UPSET FLARING					
FLARE, ELEVATED WITHOUT STEAM, HIGH PRESSURE TIP, M-13, PROCESS GAS A/N: 588589	C24	C31		**CO**: 2000 PPMM (5) ; **PM**: (9) ; **PM**: 0.1 GRAINS/SCF (5)	A63.5, E71.1
SCRUBBER, HIGH PRESSURE FLARE, V-19, LENGTH: 10 FT ; DIAMETER: 5 FT A/N: 588589	C25				
FLARE, ELEVATED WITHOUT STEAM, LOW PRESSURE TIP, M-14, PROCESS GAS WITH A/N: 588589 SCRUBBER, V-20, LOW PRESSURE FLARE, LENGTH: 7 FT ; DIAMETER: 2 FT 6 IN VESSEL, FLAME FRONT GENERATOR, M-15, WIDTH: 2 FT ; HEIGHT: 5 FT ; LENGTH: 5 FT	C26 C27	C28		**CO**: 2000 PPMM (5) ; **PM**: (9) ; **PM**: 0.1 GRAINS/SCF (5)	A63.5, E71.1
Process 7: VAPOR RECOVERY SYSTEM					
SCRUBBER, V-11, HEIGHT: 8 FT ; DIAMETER: 1 FT 6 IN A/N: 441326	C28	D3 D4 D10 D11 D13 C26 C29 D38 D39 D40			

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

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 7: VAPOR RECOVERY SYSTEM					
COMPRESSOR, C-1 A/N: 441326	C29	C28 C30			
GAS SEPARATOR, V-33, GAS-OIL A/N: 441326	C30	C29 C32			
SCRUBBER, V-35, CASING GAS A/N: 441326	C31	D1 D2 D5 D6 D7 D8 D9 C24 C32			
SCRUBBER, SUCTION, V-12 A/N: 441326	C32	C30 C31			
Process 8: NATURAL GAS DEHYDRATION					
SCRUBBER, V-30, GLYCOL CONTACTOR, INLET GAS, LENGTH: 7 FT ; DIAMETER: 2 FT WITH A/N: 441325 VESSEL, GLYCOL CONTACTOR, V-31	D33 D34				A63.6
TANK, FLASH, V-32, HYDROCARBON, HEIGHT: 7 FT ; DIAMETER: 2 FT 6 IN A/N: 441325	D35				A63.6, E57.1
FILTER, CARTRIDGE TYPE, F-28, HEIGHT: 4 FT 2 IN; DIAMETER: 8 FT A/N: 441325	D36				A63.6
FILTER, CARTRIDGE TYPE, F-29, HEIGHT: 4 FT 2 IN; DIAMETER: 8 FT A/N: 441325	D37				A63.6
Process 9: PRODUCTION WASTEWATER TREATMENT					
TANK, HOLDING, TK-3, PRODUCED WATER CPI, 425 BBL; WIDTH: 12 FT ; HEIGHT: 10 FT ; LENGTH: 20 FT A/N: 441324	D38	C28			E57.1, E127.1
FLOATATION UNIT, TK-4, 400 BBL A/N: 441324	D39	C28			E57.1, E127.1

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

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 9: PRODUCTION WASTEWATER TREATMENT					
TANK, FIXED ROOF, HOLDING, TK-6, PRODUCED WATER POLISHING, 150 BBL; WIDTH: 12 FT ; HEIGHT: 6 FT ; LENGTH: 12 FT A/N: 441324	D40	C28			E57.1, E127.1
TANK, FIXED ROOF, HOLDING, TK-11, DISPOSAL PILE, HEIGHT: 130 FT ; DIAMETER: 42 FT A/N: 441324	D41				E57.1, E127.1
Process 10: FUGITIVE EMISSIONS					
FUGITIVE EMISSIONS, COMPRESSORS A/N: 441326	D42				H23.1
FUGITIVE EMISSIONS, FLANGES A/N: 441347	D43				H23.1
FUGITIVE EMISSIONS, PUMPS A/N: 441347	D44				H23.1
FUGITIVE EMISSIONS, VALVES A/N: 441347	D45				H23.1

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

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: DEVICE ID INDEX

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: DEVICE ID INDEX

Device Index For Section D			
Device ID	**Section D Page No.**	**Process**	**System**
D2	1	1	0
D3	1	1	0
D4	1	1	0
D5	1	1	0
D6	1	1	0
D7	1	1	0
D8	1	1	0
D9	1	1	0
D11	1	1	0
D12	2	1	0
D13	2	1	0
D14	2	2	0
D15	2	2	0
D16	2	2	0
D17	2	3	0
D18	3	3	0
D20	4	3	0
D21	4	3	0
D22	5	4	0
C24	5	6	0
C25	5	6	0
C26	5	6	0
C27	5	6	0
C28	5	7	0
C29	6	7	0
C30	6	7	0
C31	6	7	0
C32	6	7	0
D33	6	8	0
D34	6	8	0
D35	6	8	0
D36	6	8	0
D37	6	8	0
D38	6	9	0
D39	6	9	0

FACILITY PERMIT TO OPERATE
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SECTION D: DEVICE ID INDEX

Device Index For Section D			
Device ID	**Section D Page No.**	**Process**	**System**
D40	7	9	0
D41	7	9	0
D42	7	10	0
D43	7	10	0
D44	7	10	0
D45	7	10	0
D52	3	3	0
D53	3	3	0
D54	3	3	0
D72	4	3	0

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

FACILITY CONDITIONS

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

CONTAMINANT	EMISSIONS LIMIT
Sulfur compounds	Less than or equal to 5 LBS IN ANY ONE DAY

For the purpose of this condition, the sulfur compound emission limit shall be based on quarterly gas analysis of the sulfur content of the gas at Platform Edith using District Method 307-91 or using colorimetric tubes, and daily gas use. The operator shall calculate the daily SOx emissions by multiplying the results of the recent quarterly gas analysis in ppmv as H2S by 0.0899 and by the fuel use in mmscf/day for all combustion devices combusting field gas. The operator shall keep records of the quarterly gas analysis and daily fuel gas usage for a minimum of 2 years.

If the daily emissions of SOx as H2S PPMV exceed three lbs per day, applicant shall collect the gas samples at least once every month.

F14.1 The operator shall not purchase liquid fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

F14.2 The operator shall not use liquid fuel containing sulfur compounds in excess of 0.05 percent by weight.

F30.1 For the purpose of exemption from Title V requirements, the total emissions from this facility shall not equal or exceed the following specified amounts:

Pollutant	Emission Limit (Tons in any 12 consecutive calendar-month period)
NOx	10

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

a). If the total facility emissions for any of the specified pollutant amounts are in exceedance in any 12 consecutive calendar-month period, or if the facility operator fails to comply with the following requirements, the Facility Permit holder shall submit a Title V Permit application package and obtain a Title V permit pursuant to the requirements specified in Rule 3003. To ensure compliance with the emission limit(s) of this condition, the facility operator shall:

i). determine emissions according to the requirements of Rule 2011 for SOx emissions and Rule 2012 for NOx emissions, as applicable;

ii). in addition to complying with all applicable monitoring, recordkeeping and reporting requirements of Regulation XX, monitor and record on a monthly basis the total facility emissions, excluding emissions identified in Rule 3000(b)(28)(D) and (E), for each 12 consecutive month period, and

iii). for any 12 consecutive month period in which emissions do not comply with an emission limit in this condition, submit to AQMD within 15 days a report of noncompliance and the total subject emissions from the facility for the preceding 12 consecutive calendar-month period.

b). For the purpose of determining compliance with the emission limit(s), the total emissions from this facility shall be equal to the emissions recorded each month by the facility, including any corrections as allowed by Rule 2004, and including any corrections resulting from an AQMD audit of this facility.

c). The provisions of this condition are the sole method of determining compliance with the facility emission limit(s) of this condition.

F67.1 The facility operator shall comply with all terms and conditions specified Total combined volume of field gas combusted in process flares and all of the micro-turbines shall not exceed 12 million standard cubic feet in any 30 day period.

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

DEVICE CONDITIONS

A. Emission Limits

A63.1 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 5550 LBS IN ANY ONE MONTH

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from equipment D1 through D13.

[Devices subject to this condition : D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13]

A63.4 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 1165 LBS IN ANY ONE MONTH
ROG	Less than or equal to 430 LBS IN ANY ONE MONTH
PM10	Less than or equal to 385 LBS IN ANY ONE MONTH
SOX	Less than or equal to 355 LBS IN ANY ONE MONTH

The operator shall calculate the emission limit(s) based on fuel use and the following emission factors (lbs/1000gal): ROG: 37.5, CO: 102, SOx: 31.2, PM10: 33.5

[Devices subject to this condition : D20, D21]

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

A63.5 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 6432 LBS IN ANY ONE MONTH
PM10	Less than or equal to 327 LBS IN ANY ONE MONTH
ROG	Less than or equal to 239 LBS IN ANY ONE MONTH
NOX	Less than or equal to 1167 LBS IN ANY ONE MONTH

The operator shall calculate the emission limit(s) based on maximum flare rating and the following emission factors (lbs/mmbtu): NOx: 0.0718, ROG: 0.01472, CO: 0.3957, PM10: 0.0202

[Devices subject to this condition : C24, C26]

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

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 180 LBS IN ANY ONE MONTH

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from equipment D33, D35 through D37.

[Devices subject to this condition : D33, D35, D36, D37]

A63.7 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 50 LBS IN ANY ONE MONTH

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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

ROG	Less than or equal to 4 LBS IN ANY ONE MONTH
PM10	Less than or equal to 4 LBS IN ANY ONE MONTH

The operator shall calculate the emission limit(s) based on fuel use and the following emission factors (lbs/mmcf): ROG 2.8, CO: 35, PM10 3.0

[Devices subject to this condition : D22]

A63.8 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 16.17 LBS IN ANY ONE MONTH
PM10	Less than or equal to 5.29 LBS IN ANY ONE MONTH
ROG	Less than or equal to 5.92 LBS IN ANY ONE MONTH
SOX	Less than or equal to 4.96 LBS IN ANY ONE MONTH

The operator shall calculate the emission limit(s) based on operating time, maximum fuel use of 37.72 gal/hr (from the engine manufacturer performance curve data) and the following emission factors (lbs/1000gal): ROG: 37.5, CO: 102, SOx: 31.2, PM10: 33.5. Limits specified above are for testing and maintenance hours only.

[Devices subject to this condition : D17]

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

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 7.06 LBS IN ANY ONE MONTH
PM10	Less than or equal to 2.31 LBS IN ANY ONE MONTH
ROG	Less than or equal to 2.60 LBS IN ANY ONE MONTH

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

SOX	Less than or equal to 2.14 LBS IN ANY ONE MONTH

The operator shall calculate the emission limit(s) based on operating time, maximum fuel use of 16.48 gal/hr (from the engine manufacturer performance curve) and the following emission factors (lbs/1000gal): ROG: 37.5, CO: 102, SOx: 31.2, PM10: 33.5. The limits specified above are for testing and maintenance hours only.

[Devices subject to this condition : D18]

A195.4 The 9 PPMV NOX emission limit(s) is averaged over 60 minutes, at 15% O2, dry.

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

A195.5 The 40 PPMV CO emission limit(s) is averaged over 60 minutes, at 15% O2, dry.

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

A195.6 The 7 PPMV ROG emission limit(s) is averaged over 60 minutes, at 15 % O2, dry and measured as methane.

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

C. Throughput or Operating Parameter Limits

C1.1 The operator shall limit the operating time to no more than 200 hour(s) in any one year.

The operator shall limit the number of hours used for testing and maintenance to 4.2 hours per month and 20 hours per year..

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D17, D18]

C1.2 The operator shall limit the operating time to no more than 499 hour(s) in any one year.

[Devices subject to this condition : D20, D21]

C1.4 The operator shall limit the operating time to no more than 200 hour(s) in any one year.

A. Which includes no more than 50 hours in any one calendar year for maintenance and testing purposes, including testing to comply with requirements of the National Fire Protection Association (NFPA).

B. Which includes no more than 4.2 hours in any one calendar month for maintenance and testing purposes, including testing to comply with requirements of the National Fire Protection Association (NFPA).

C. Operating beyond the 50 hours per calendar year allotted for maintenance and testing purposes shall be allowed only in the event of an emergency firefighting operation.

[Devices subject to this condition : D72]

C177.1 The operator shall set and maintain the fuel injection timing of the engine at 4 degrees retarded relative to standard timing.

[Devices subject to this condition : D17, D18, D20, D21]

D. Monitoring/Testing Requirements

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

D12.1 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[Devices subject to this condition : D17, D18, D20, D21, D72]

D12.4 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate being supplied to the flare.

The operator shall also install and maintain a device to continuously record the parameter being measured.

Fuel flow shall be recorded in standard cubic feet.

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

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

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

Source test shall be conducted when this equipment is operating at maximum load.

The test shall be conducted at least once every three years.

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

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

[Devices subject to this condition : D20, D21]

D29.4 The operator shall conduct source test(s) for the pollutant(s) identified below.

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SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
CO emissions	District method 100.1	1 hour	Outlet
NOX emissions	District method 100.1	1 hour	Outlet
oxygen concentration	District method 100.1	1 hour	Outlet
VOC emissions	District method 100.1	1 hour	Outlet

The test shall be conducted pursuant to Rule 2012(j) to demonstrate compliance with all applicable requirements of Rule 2012.

The test results shall be submitted to SCAQMD within 60 days after the test date. SCAQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to demonstrate compliance with Rules 1303 and 2005 concentration and emission limits.

The test shall be conducted when this equipment is operating at maximum load.

The test shall be conducted in accordance with a District approved source test protocol.

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

D90.1 The operator shall periodically monitor the CO, NOx, and O2 concentrations at the microturbine exhaust according to the following specifications:

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DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

The operator shall monitor CO, NOx, and Oxygent in accordance with the following: the test shall be conducted yearly for each microturbine by the operator or an independent lab using a portable analyzer and in accordance with SCAQMD's document entitled "Testing Guidelinse (protocol) for Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Sulfur Dioxide." The test shall be conducted when this equipment is operating at normal conditions.

The test shall be conducted to determine compliance with CO and NOx limits.

Microturbines that were not operated during the year due to lack of facility gas or repairs will not have to perform this test.

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

E. Equipment Operation/Construction Requirements

E57.1 The operator shall vent this equipment to a gas sales line or to a flare or to a SCAQMD permitted combustion device whenever this equipment is in operation.

[Devices subject to this condition : D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D35, D38, D39, D40, D41]

E71.1 The operator shall only use this equipment during process upset or emergency situations or when other SCAQMD permitted combustion devices are not available. Total volume of field gas combusted in open flame flare(s) shall not be more than 12.51 million scf per month..

[Devices subject to this condition : C24, C26]

E114.1 The operator shall not use this equipment in conjunction with any utility voluntary demand reduction program.

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DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D17, D18, D20, D21, D72]

E127.1 The operator shall keep gauge/sample hatches closed except during actual gauging/sampling operations.

[Devices subject to this condition : D11, D13, D14, D15, D38, D39, D40, D41]

E162.1 The operator shall use this equipment only during utility failure periods, except for maintenance purposes.

[Devices subject to this condition : D17, D18, D72]

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

Total volume of field gas combusted in all microturbines shall not exceed 12 million scf in any 30 day period

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

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

manufacturer's written emission-related instructions (or procedures developed by the operator that are approved by the engine manufacturer), change only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR Part 1068, as they apply.

[Devices subject to this condition : D72]

E193.3 The operator shall install this equipment according to the following specifications:

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

The operator shall comply with the emission standards specified in 40 CFR 60.4205(c) by purchasing an engine certified to the emission standards in 40 CFR 60.4205(c), as applicable, for the same model year and maximum NFPA nameplate engine power. The engine must be installed and configured according to the manufacturer's emission related specifications.

[Devices subject to this condition : D72]

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

The permit for this equipment shall expire if construction of this equipment is not complete within one year from issuance date of this permit unless an extension is approved in writing by the Executive Officer. A written request for extension shall be filed with the South Coast AQMD Engineering Division prior to the permit's expiration date. The written request shall include reasons for extension request, status of modification, estimated completion date, and increments of progress.

[Devices subject to this condition : D72]

H. Applicable Rules

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
ROG	District Rule	1173

[Devices subject to this condition : D42, D43, D44, D45, D52, D53, D54, D55, D56, D57, D58, D59]

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
H2S	District Rule	431.1

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
CO	District Rule	1110.2
ROG	District Rule	1110.2

[Devices subject to this condition : D20, D21]

H23.6 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1470
PM	District Rule	1472
SOX	District Rule	431.2
HAPs	40CFR63, SUBPART	ZZZZ
—	40CFR60, SUBPART	IIII

[Devices subject to this condition : D72]

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

I. Administrative

I297.14 This equipment shall not be operated unless the facility holds 102 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[Devices subject to this condition : D72]

K. Record Keeping/Reporting

K40.2 The operator shall provide to the District a source test report in accordance with the following specifications:

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

Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

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

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the operating conditions of the basic equipment under which the test was conducted.

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D52, D53, D54, D55, D56, D57, D58, D59]

K67.2 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

A. The operator shall keep a log of engine operations documenting the total time the engine is operated each month and specific reasons for operation as:

B. Emergency Use,

C. Maintenance and testing,

D. Other (describe the reason for operating).

E. In addition, each time the engine is manually started, the log shall include the date of operation, the specific reason for operation, and the totalizing hour meter reading (in hours and tenths of hours) at the beginning and end of operation.

F. On or before January 15th of each year, the operator shall record the following in the engine operating log: the total hours of operation for the previous calendar year; and, the total hours of engine operation for maintenance and testing for the previous calendar year.

G. The engine operating log shall be retained on-site for a minimum of five calendar years and shall be made available to the Executive Officer or representative upon request.

[Devices subject to this condition : D72]

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

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FACILITY PERMIT TO OPERATE

DCOR LLC
OFFSHORE PLATFORM EDITH OCS P-0296
HUNTINGTON BEACH, CA 92649

NOTICE

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

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

Wayne Nastri
Executive Officer

For Azar Dabiri
By _____
Jason Aspell
Deputy Executive Officer
Engineering and Permitting

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

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FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, SIX CYLINDERS, DIESEL FUEL, JOHN DEERE, MODEL 6090CI550, WITH MANUFACTURER INTEGRATED EMISSION CONTROL SYSTEM, DRIVING THE SOUTH CRANE, WITH AFTERCOOLER, TURBOCHARGER, 350 BHP WITH A/N: 630259 Permit to Construct Issued: 05/03/23	D62	C64	NOX: LARGE SOURCE**	**CO**: 2.61 GRAM/BHP-HR DIESEL (8) **[40CFR 60 Subpart IIII, 8-10-2022]**; **CO**: 2000 PPMV DIESEL (5) [RULE 1110.2, 11-1-2019]; **NOX**: 0.298 GRAM/BHP-HR DIESEL (8) **[40CFR 60 Subpart IIII, 8-10-2022]**; **NOX**: 13.65 LBS/1000 GAL DIESEL (1) **[RULE 2012, 2-5-2016]**; **NOX**: 25.64 PPMV DIESEL (3) **[RULE 2012, 2-5-2016]**; **PM**: (9) **[RULE 404 2-7-1986]**; **PM**: 0.015 GRAM/BHP-HR DIESEL (8) **[40CFR 60 Subpart IIII, 8-10-2022]**; **ROG**: 0.142 GRAM/BHP-HR DIESEL (8) **[40CFR 60 Subpart IIII, 8-10-2022]**	A195.7, C1.3, D12.1, D29.5, E448.2, H23.6, I297.13, K40.3, K67.1
CO OXIDATION CATALYST, INTEGRATED	C64	D62 C65			
DIESEL PARTICULATE FILTER, INTEGRATED	C65	C64 C66			
SELECTIVE CATALYTIC REDUCTION, INTEGRATED, UREA BASED REAGENT	C66	C65 B67			
STORAGE TANK, DIESEL EXHAUST FLUID (UREA BASED FLUID)		C66			

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

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 3: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, NON-EMERGENCY, SIX CYLINDERS, DIESEL FUEL, JOHN DEERE, MODEL 6090CI550, WITH MANUFACTURER INTEGRATED EMISSION CONTROL SYSTEM, DRIVING THE NORTH CRANE, WITH AFTERCOOLER, TURBOCHARGER, 350 BHP WITH A/N: 630260 Permit to Construct Issued: 05/03/23	D63	C68	NOX: LARGE SOURCE**	**CO**: 2.61 GRAM/BHP-HR DIESEL (8) [**40CFR 60 Subpart IIII, 8-10-2022**]; **CO**: 2000 PPMV DIESEL (5) [RULE 1110.2, 11-1-2019]; **NOX**: 0.298 GRAM/BHP-HR DIESEL (8) [**40CFR 60 Subpart IIII, 8-10-2022**]; **NOX**: 13.65 LBS/1000 GAL DIESEL (1) [**RULE 2012, 2-5-2016**]; **NOX**: 25.64 PPMV DIESEL (3) [**RULE 2012, 2-5-2016**]; **PM**: (9) [**RULE 404 2-7-1986**]; **PM**: 0.015 GRAM/BHP-HR DIESEL (8) [**40CFR 60 Subpart IIII, 8-10-2022**]; **ROG**: 0.142 GRAM/BHP-HR DIESEL (8) [**40CFR 60 Subpart IIII, 8-10-2022**]	A195.7, C1.3, D12.1, D29.5, E448.2, H23.6, I297.13, K40.3, K67.1
CO OXIDATION CATALYST, INTEGRATED	C68	D63 C69			
DIESEL PARTICULATE FILTER, INTEGRATED	C69	C68 C70			
SELECTIVE CATALYTIC REDUCTION, INTEGRATED, UREA BASED REAGENT	C70	C69 B71			
STORAGE TANK, DIESEL EXHAUST FLUID (UREA BASED FLUID)		C70			

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

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: DEVICE ID INDEX

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	**Section H Page No.**	**Process**	**System**
D62	1	3	0
D63	2	3	0
C64	1	3	0
C65	1	3	0
C66	1	3	0
C68	2	3	0
C69	2	3	0
C70	2	3	0

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

FACILITY CONDITIONS

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

CONTAMINANT	EMISSIONS LIMIT
Sulfur compounds	Less than or equal to 5 LBS IN ANY ONE DAY

For the purpose of this condition, the sulfur compound emission limit shall be based on quarterly gas analysis of the sulfur content of the gas at Platform Edith using District Method 307-91 or using colorimetric tubes, and daily gas use. The operator shall calculate the daily SOx emissions by multiplying the results of the recent quarterly gas analysis in ppmv as H2S by 0.0899 and by the fuel use in mmscf/day for all combustion devices combusting field gas. The operator shall keep records of the quarterly gas analysis and daily fuel gas usage for a minimum of 2 years..

If the daily emissions of SOx as H2S PPMV exceed three lbs per day, applicant shall collect the gas samples at least once every month.

[**RULE 431.1, 6-12-1998**]

F14.1 The operator shall not purchase liquid fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

[RULE 431.2, 9-15-2000]

F14.2 The operator shall not use liquid fuel containing sulfur compounds in excess of 0.05 percent by weight.

[**RULE 431.2, 5-4-1990**]

F30.1 For the purpose of exemption from Title V requirements, the total emissions from this facility shall not equal or exceed the following specified amounts:

Pollutant	Emission Limit (Tons in any 12 consecutive calendar-month period)

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

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

NOx | 10

a). If the total facility emissions for any of the specified pollutant amounts are in exceedance in any 12 consecutive calendar-month period, or if the facility operator fails to comply with the following requirements, the Facility Permit holder shall submit a Title V Permit application package and obtain a Title V permit pursuant to the requirements specified in Rule 3003. To ensure compliance with the emission limit(s) of this condition, the facility operator shall:

i). determine emissions according to the requirements of Rule 2011 for SOx emissions and Rule 2012 for NOx emissions, as applicable;

ii). in addition to complying with all applicable monitoring, recordkeeping and reporting requirements of Regulation XX, monitor and record on a monthly basis the total facility emissions, excluding emissions identified in Rule 3000(b)(28)(D) and (E), for each 12 consecutive month period, and

iii). for any 12 consecutive month period in which emissions do not comply with an emission limit in this condition, submit to AQMD within 15 days a report of noncompliance and the total subject emissions from the facility for the preceding 12 consecutive calendar-month period.

b). For the purpose of determining compliance with the emission limit(s), the total emissions from this facility shall be equal to the emissions recorded each month by the facility, including any corrections as allowed by Rule 2004, and including any corrections resulting from an AQMD audit of this facility.

c). The provisions of this condition are the sole method of determining compliance with the facility emission limit(s) of this condition.

F67.1 The facility operator shall comply with all terms and conditions specified Total combined volume of field gas combusted in process flares and all of the micro-turbines shall not exceed 12 million standard cubic feet in any 30 day period.

[RULE 2012, 12-4-2015]

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

DEVICE CONDITIONS

A. Emission Limits

A195.7 The 25.64 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry..

[**RULE 2012, 2-5-2016**]

[Devices subject to this condition : D62, D63]

C. Throughput or Operating Parameter Limits

C1.3 The operator shall limit the operating time to no more than 3075 hours in any one calendar year.

[**RULE 2012, 2-5-2016**]

[Devices subject to this condition : D62, D63]

D. Monitoring/Testing Requirements

D12.1 The operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[RULE 1110.2, 11-1-2019; **RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 2012, 2-5-2016**]

[Devices subject to this condition : D62, D63]

D29.5 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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

The source tests shall consist of, but may not be limited to, testing for NOx emissions, referenced at 15 percent volume stack gas oxygen on a dry basis.

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

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when the equipment is operating at maximum and minimum loads.

Sampling facilities shall comply with the South Coast AQMD guidelines for construction of sampling and testing facilities, pursuant to Rule 217.

The test(s) shall be conducted at least once every three years.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 2005, 6-3-2011; RULE 2012, 5-6-2005**]

[Devices subject to this condition : D62, D63]

E. Equipment Operation/Construction Requirements

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

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

The permit for this equipment shall expire if construction of this equipment is not complete within one year from issuance date of this permit unless an extension is approved in writing by the Executive Officer. A written request for extension shall be filed with the South Coast AQMD Engineering Division prior to the permit's expiration date. The written request shall include reasons for extension request, status of modification, estimated completion date, and increments of progress.

[**RULE 205, 1-5-1990**]

[Devices subject to this condition : D62, D63]

H. Applicable Rules

H23.6 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1470
PM	District Rule	1472
SOX	District Rule	431.2
HAPs	40CFR63, SUBPART	ZZZZ
—	40CFR60, SUBPART	IIII

[RULE 1470, 10-1-2021; RULE 1472, 3-7-2008; RULE 431.2, 9-15-2000; **40CFR 60 Subpart IIII, 8-10-2022; 40CFR 63 Subpart ZZZZ, 8-10-2022**]

[Devices subject to this condition : D62, D63]

I. Administrative

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

I297.13 This equipment shall not be operated unless the facility holds 123 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

In lieu of holding RTCs for the entire duration specified above, RTCs held for the purpose of demonstrating compliance with this condition may be transferred as specified below, provided quarterly emissions do not exceed the corresponding quarterly limit listed in the table below. The amount available for transfer shall be as specified in Rule 2005(f)(3). Such amount may be transferred only after the end of the subject quarter. If the first day of operation does not coincide with the first day of a calendar quarter, the emission limit for that calendar quarter shall be prorated based on the number of days remaining in the calendar quarter as of the first day of operation and the amount available for transfer after that calendar quarter shall be the prorated emission limit minus the actual emissions reportable for that calendar quarter pursuant to RECLAIM Monitoring, Recordkeeping, and Reporting protocols (MRR) and the emission limit for the portion of the first year of operation falling in the fifth calendar quarter shall be prorated based on the number of days of the first year of operation occurring in that calendar quarter and the amount available for transfer after that calendar quarter shall be the prorated emission limit minus the actual emissions reportable for the portion of the first year of operation occurring in that calendar quarter pursuant to RECLAIM MRR. If the quarterly certified emissions for any quarter (or portion of a quarter occurring within the first year of operation) exceed the corresponding quarterly emission limit or prorated quarterly emission limit, as applicable, the facility may only sell RTCs held pursuant to Rule 2005(f) after the first calendar quarter ending at least one year after operation commences.

Calendar Quarter	Emission Limit (Pounds of NOx RTCs)
January 1 through March 31	31
April 1 through June 30	31
July 1 through September 30	31

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

October 1 through December 31	30

[**RULE 2005, 12-4-2015;** RULE 2005, 11-5-2021; RULE 2005(c)(2), 12-4-2015]

[Devices subject to this condition : D62, D63]

K. Record Keeping/Reporting

K40.3 The operator shall provide to the District a source test report in accordance with the following specifications:

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

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

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

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, engine power output (MW), and brake-specific fuel consumption (BSFC) of the engine, in pounds/hp-hr under which the test was conducted.

[RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1304(a)-Modeling and Offset Exemption, 11-5-2021; **RULE 2012, 2-5-2016**]

[Devices subject to this condition : D62, D63]

K67.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Engine operating hours

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

[RULE 2012, 2-5-2016]

[Devices subject to this condition : D62, D63]

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
DCOR LLC

SECTION A: FACILITY INFORMATION

LEGAL OWNER &/OR OPERATOR: DCOR LLC

LEGAL OPERATOR (if different than owner):

EQUIPMENT LOCATION: OFFSHORE PLATFORM EDITH OCS P-0296
HUNTINGTON BEACH, CA 92649

MAILING ADDRESS: 1000 TOWN CENTER DR SUITE 600
OXNARD, CA 93036

RESPONSIBLE OFFICIAL: BOB GARCIA

TITLE: VP FACILITIES AND INFRASTRUCTURE

TELEPHONE NUMBER: (805) 535-2030

CONTACT PERSON: HEATHER CARRENO

TITLE: REGULATORY COMPLIANCE COORDINATOR

TELEPHONE NUMBER: (805) 535-2081

TITLE V	RECLAIM
NO	NOx: YES SOx: NO CYCLE: 1 ZONE: COASTAL

South Coast Air Quality Management District
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FACILITY PERMIT TO OPERATE

DCOR LLC
OFFSHORE PLATFORM EDITH OCS P-0296
HUNTINGTON BEACH, CA 92649

NOTICE

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

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

Wayne Nastri
Executive Officer

B
Amir Dejbakhsh
Deputy Executive Officer
Engineering and Permitting

South Coast Air Quality Management District
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DCOR LLC

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SECTION J: AIR TOXICS

NOT APPLICABLE

FACILITY PERMIT TO OPERATE
DCOR LLC

APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]

The operator shall not discharge into the atmosphere from this equipment, particulate matter in excess of the concentration at standard conditions, shown in Table 404(a). Where the volume discharged is between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

TABLE 404(a)

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter"Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476
40	1413	377	.165	1200	42380	106	.0463
45	1589	361	.158	1300	45910	102	.0445

FACILITY PERMIT TO OPERATE
DCOR LLC

APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter"Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
50	1766	347	.152	1400	49440	100	.0437
60	2119	324	.141	1500	52970	97	.0424
70	2472	306	.134	1750	61800	92	.0402
80	2825	291	.127	2000	70630	87	.0380
90	3178	279	.122	2250	79460	83	.0362
100	3531	267	.117	2500	88290	80	.0349
125	4414	246	.107	3000	105900	75	.0327
150	5297	230	.100	4000	141300	67	.0293
175	6180	217	.0947	5000	176600	62	.0271
200	7063	206	.0900	6000	211900	58	.0253
250	8829	190	.0830	8000	282500	52	.0227
300	10590	177	.0773	10000	353100	48	.0210
350	12360	167	.0730	15000	529700	41	.0179
400	14130	159	.0694	20000	706300	37	.0162
450	15890	152	.0664	25000	882900	34	.0148

FACILITY PERMIT TO OPERATE
DCOR LLC

APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter" Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
500	17660	146	.0637	30000	1059000	32	.0140
600	21190	137	.0598	40000	1413000	28	.0122
700	24720	129	.0563	50000	1766000	26	.0114
800	28250	123	.0537	70000 or more	2472000 or more	23	.0100

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Facility ID: 143741
Revision #: 18
Date: February 24, 2018

FACILITY PERMIT TO OPERATE

DCOR LLC
OFFSHORE PLATFORM EDITH OCS P-0296
HUNTINGTON BEACH, CA 92649

NOTICE

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

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

Wayne Nastri
Executive Officer

By
Laki Tisopulos, Ph.D., P.E.
Deputy Executive Officer
Engineering and Permitting

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

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SECTION E: ADMINISTRATIVE CONDITIONS

The operating conditions in this section shall apply to all permitted equipment at this facility unless superseded by condition(s) listed elsewhere in this permit.

1. The permit shall remain effective unless this permit is suspended, revoked, modified, reissued, denied, or it is expired for nonpayment of permit processing or annual operating fees. [201, 203, 209, 301]

   a. The permit must be renewed annually by paying annual operating fees, and the permit shall expire if annual operating fees are not paid pursuant to requirements of Rule 301(d). [301(d)]
   b. The Permit to Construct listed in Section H shall expire one year from the Permit to Construct issuance date, unless a Permit to Construct extension has been granted by the Executive Officer or unless the equipment has been constructed and the operator has notified the Executive Officer prior to the operation of the equipment, in which case the Permit to Construct serves as a temporary Permit to Operate. [202, 205]
   c. The Title V permit shall expire as specified under Section K of the Title V permit. The permit expiration date of the Title V facility permit does not supercede the requirements of Rule 205. [205, 3004]

2. The operator shall maintain all equipment in such a manner that ensures proper operation of the equipment. [204]

3. This permit does not authorize the emissions of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules and Regulations of the AQMD. This permit cannot be considered as permission to violate existing laws, ordinances, regulations, or statutes of other governmental agencies. [204]

4. The operator shall not use equipment identified in this facility permit as being connected to air pollution control equipment unless they are so vented to the identified air pollution control equipment which is in full use and which has been included in this permit. [204]

5. The operator shall not use any equipment having air pollution control device(s) incorporated within the equipment unless the air pollution control device is in full operation. [204]

6. The operator shall maintain records to demonstrate compliance with rules or permit conditions that limit equipment operating parameters, or the type or quantity of material processed. These records shall be made available to AQMD personnel upon request and be maintained for at least: [204]

SECTION E: ADMINISTRATIVE CONDITIONS

a. Three years for a facility not subject to Title V; or
b. Five years for a facility subject to Title V.

7. The operator shall maintain and operate all equipment to ensure compliance with all emission limits as specified in this facility permit. Compliance with emission limits shall be determined according to the following specifications, unless otherwise specified by AQMD rules or permit conditions: [204]

a. For internal combustion engines and gas turbines, measured concentrations shall be corrected to 15 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1110.2, 1134, 204]
b. For other combustion devices, measured concentrations shall be corrected to 3 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1146, 1146.d, 204]
c. For a large NOx source, compliance with a RECLAIM concentration limit shall be measured over a continuous 60 minutes for that source; [2012]
d. For non-combustion sources, compliance with emission limits shall be determined and averaged over a period of 60 minutes; [204]
e. For the purpose of determining compliance with Rule 407, carbon monoxide (CO) shall be measured on a dry basis and be averaged over 15 consecutive minutes, and sulfur compounds which would exist as liquid or gas at standard conditions shall be calculated as sulfur dioxide (SO2) and be averaged over 15 consecutive minutes; [407]
f. For the purpose of determining compliance with Rule 409, combustion contaminant emission measurements shall be corrected to 12 percent of carbon dioxide (CO2) at standard conditions and averaged over 15 consecutive minutes. [409]
ge For the purpose of determining compliance with Rule 475, combustion contaminant emission measurements shall be corrected to 3 percent of oxygen (O2) at standard conditions and averaged over 15 consecutive minutes or any other averaging time specified by the Executive Officer. [475]

8. All equipment operating under the RECLAIM program shall comply concurrently with all provisions of AQMD Rules and Regulations, except those listed in Table 1 of Rule 2001 for NOx RECLAIM sources and Table 2 of Rule 2001 for SOx RECLAIM sources. Those provisions listed in Tables 1 or 2 shall not apply to NOx or SOx emissions after the date the facility has demonstrated compliance with all monitoring and reporting requirements of Rules 2011 or 2012, as applicable. Provisions of the listed AQMD rules in Tables 1 or 2 which have initial implementation dates in 1994 shall not apply to a RECLAIM NOx or SOx source, respectively. [2001]

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SECTION E: ADMINISTRATIVE CONDITIONS

9. The operator shall, when a source test is required by AQMD, provide a source test protocol to AQMD no later than 60 days before the proposed test date. The test shall not commence until the protocol is approved by AQMD. The test protocol shall contain the following information: [204, 304]

   a. Brief description of the equipment tested.
   b. Brief process description, including maximum and normal operating temperatures, pressures, through-put, etc.
   c. Operating conditions under which the test will be performed.
   d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts/stacks at the sampling locations, and distances of flow disturbances, (e,g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
   e. Brief description of sampling and analytical methods used to measure each pollutant, temperature, flow rates, and moisture.
   f. Description of calibration and quality assurance procedures.
   g. Determination that the testing laboratory qualifies as an "independent testing laboratory" under Rule 304 (no conflict of interest).

10. The operator shall submit a report no later than 60 days after conducting a source test, unless otherwise required by AQMD Rules or equipment-specific conditions. The report shall contain the following information: [204]

   a. The results of the source test.
   b. Brief description of the equipment tested.
   c. Operating conditions under which test will be performed.
   d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts/stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
   e. Field and laboratory data forms, strip charts and analyses.
   f. Calculations for volumetric flow rates, emission rates, control efficiency, and overall control efficiency.

11. The operator shall, when a source test is required, provide and maintain facilities for sampling and testing. These facilities shall comply with the requirements of AQMD Source Test Method 1.1 and 1.2. [217]

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SECTION E: ADMINISTRATIVE CONDITIONS

12. Whenever required to submit a written report, notification or other submittal to the Executive Officer, AQMD, or the District, the operator shall mail or deliver the material to: Deputy Executive Officer, Engineering and Compliance, AQMD, 21865 E. Copley Drive, Diamond Bar, CA 91765-4182. [204]

FACILITY PERMIT TO OPERATE
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SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS

The Facility shall comply with all applicable monitoring and source testing requirements in Regulation XX. These requirements may include but are not limited to the following:

I. NOx Monitoring Conditions

A. The Operator of a NOx Major Source, as defined in Rule 2012, shall, as applicable:

Not Applicable

B. The Operator of a NOx Large Source, as defined in Rule 2012, shall, as applicable:

Not Applicable

C. The Operator of a NOx Process Unit, as defined in Rule 2012, shall, as applicable:

1. Install, maintain, and operate a totalizing fuel meter or any device approved by the Executive Officer to measure quarterly fuel usage or other applicable variables specified in Rule 2012, Table 2012-1, and Rule 2012, Appendix A, Table 4-A. The sharing of totalizing fuel meters may be allowed by the Executive Officer if the fuel meter serves process units which have the same emission factor or emission rate. The sharing of totalizing meter shall not be allowed for process units which are required to comply with an annual heat input limit. [2012]

II. NOx Source Testing and Tune-up Conditions

1. The operator shall conduct all required NOx source testing in compliance with an AQMD-approved source test protocol. [2012]

2. The operator shall, as applicable, conduct source tests for every large NOx source no later than December 31, 1996 and every 3 years thereafter. The source test shall include the determination of NOx concentration and a relative accuracy audit of the exhaust stack flow determination (e.g. in-stack flow monitor or fuel flow monitor based F-factor calculation). Such source test results shall be submitted per the schedule described by APEP. In lieu of submitting the first source test report, the facility permit holder may submit the results of a source test not more than 3 years old which meets the requirements when conducted. [2012]

SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS

3. All NOx large sources and NOx process units shall be tuned-up in accordance with the schedule specified in Rule 2012, Appendix A, Chapter 5, Table 5-B. [2012]

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SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR RECLAIM SOURCES

The Facility shall comply with all applicable reporting and recordkeeping requirements in Regulation XX. These requirements may include but are not limited to the following:

I. Recordkeeping Requirements for all RECLAIM Sources

1. The operator shall maintain all monitoring data required to be measured or reported pursuant to Rule 2011 and Rule 2012, whichever is applicable. All records shall be made available to AQMD staff upon request and be maintained for at least:

   a. Three years after each APEP report is submitted to AQMD for a facility not subject to Title V, unless a different time period is required in Rule 2011 or Rule 2012 [2011 & 2012]; or
   b. Five years after each APEP report is submitted to AQMD for a facility subject to Title V. [3004(a)(4)(E)]
   c. Notwithstanding the above, all data gathered or computed for intervals of less than 15 minutes shall only be maintained a minimum of 48 hours. [2011 & 2012]

2. The operator shall store on site and make available to the Executive Officer upon request: records used to determine emissions, maintenance records, sources test reports, relative accuracy test audit reports, relative accuracy audit reports and fuel meter calibration records. [2011 & 2012]

II. Reporting Requirements for all RECLAIM Sources

1. The operator shall submit a quarterly certification of emissions including the facility's total NOx or SOx emissions, whichever is applicable, for the quarter within 30 days after the end of the first three quarters and 60 days after the end of the fourth quarter of a compliance year. [2011 & 2012]

NOx Reporting Requirements

A. The Operator of a NOx Major Source, as defined in Rule 2012, shall, as applicable:

Not Applicable

SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR RECLAIM SOURCES

B. The Operator of a NOx Large Source, as defined in Rule 2012, shall:

Not Applicable

C. The Operator of a NOx Process Unit, as defined in Rule 2012, shall:

1. Electronically report the calculated quarterly NOx emissions for each NOx process unit. The Operator shall comply with this requirement within 12 months of the date of entry to the RECLAIM Program. [2012]

FACILITY PERMIT TO OPERATE
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SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans, with the following exceptions:

a. The operator does not have to comply with NOx or SOx emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) which become effective after December 31,1993.

b. The operator does not have to comply with NOx or SOx emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) after the facility has received final certification of all monitoring and reporting requirements specified in Section F and Section G.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

List of approved plans:

Application	Rule
486558	1110.2

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section Dnor H of the permit.

FACILITY PERMIT TO OPERATE
DCOR LLC

APPENDIX A: NOX AND SOX EMITTING EQUIPMENT EXEMPT FROM WRITTEN PERMIT PURSUANT TO RULE 219

NONE

ONLY A PLACEHOLDER IN PERMIT - TO BE DEVELOPED

APPENDIX B

Capstone C200 Microturbine Specification Sheet

C200S Power Package

High-pressure Natural Gas, ICHP

The Signature Series Microturbine provides reliable electrical/thermal generation from natural gas with ultra-low emissions.

- Ultra-low emissions
- One moving part – minimal maintenance and downtime
- Patented air bearings – no lubricating oil or coolant
- Integrated utility synchronization – no external switchgear
- Compact modular design allows for easy, low-cost installation
- Multiple units easily combined – act as single generating source
- Remote monitoring and diagnostic capabilities
- Proven technology with tens of millions of operating hours
- Various Factory Protection Plans available

C200S ICHP Microturbine

Electrical Performance[1]

Electrical Power Output	200kW
Voltage	400/480 VAC
Electrical Service	3-Phase, 4 Wire Wye
Frequency	50/60 Hz
Electrical Efficiency LHV	33%

Fuel/Engine Characteristics[1]

Natural Gas HHV	30.7–47.5 MJ/m³ (825–1,275 BTU/scf)
Inlet Pressure	517–551 kPa gauge (75–80 psig)
Fuel Flow HHV	2,400 MJ/hr (2,280,000 BTU/hr)
Net Heat Rate LHV	10.9 MJ/kWh (10,300 BTU/kWh)

Exhaust Characteristics[1]

NOx Emissions @ 15% O_2	< 9 ppmvd (18 mg/m³)
Exhaust Mass Flow	1.3 kg/s (2.9 lbm/s)
Exhaust Gas Temperature	280°C (535°F)

Dimensions & Weight[2]

Width x Depth x Height[3]	3.0 x 2.5 x 3.8 m (117 x 100 x 148 in)
Weight - Grid Connect Model	6,000 kg (13,200 lbs)
Weight - Dual Mode Model	6,700 kg (14,700 lbs)

Minimum Clearance Requirements[4]

Horizontal Clearance	
Left	1.5 m (60 in)
Right	0.0 m (0 in)
Front	1.7 m (65 in)
Rear	2.2 m (85 in)

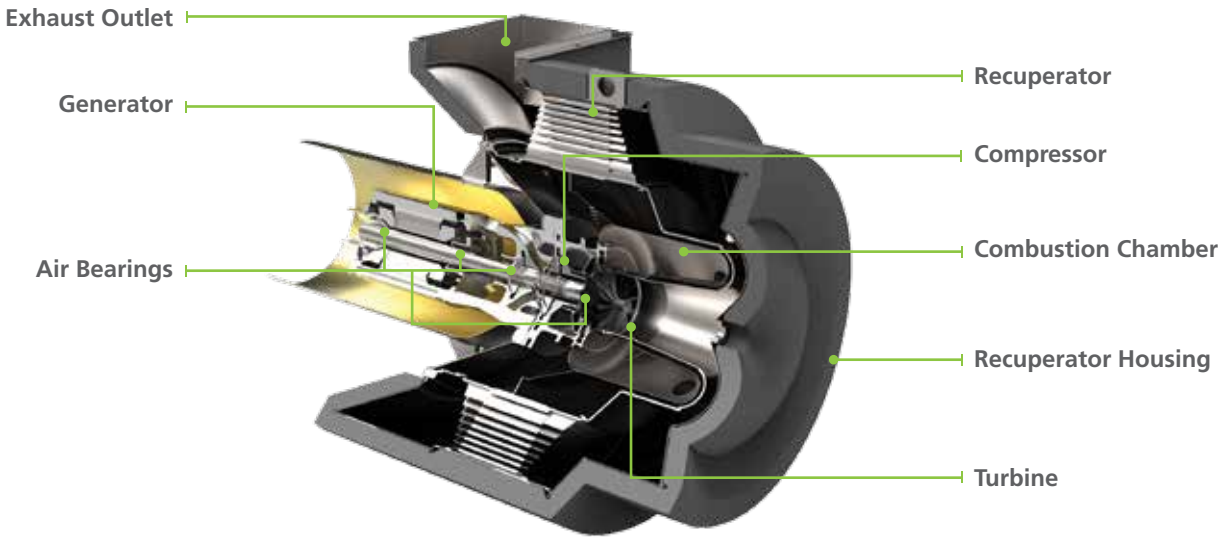
ICHP Heat Recovery[5]

Hot Water Heat Recovery	300 kW (1.0 MMBtu/hr)

Certifications

- UL 2200 Listed
- CE Certified
- Certified to the following grid interconnection standards: UL 1741, VDE, BDEW and CEI 0-16
- Compliant to California Rule 21

C200 Engine Components



(1) Nominal full power performance at ISO conditions: 15˚C (59˚F), 14.696 psia, 60% RH
(2) Approximate dimensions and weights
(3) Height dimensions are to the roofline. Exhaust outlet extends at least 241 mm (9.5 in) above the roofline
(4) Clearance requirements may increase due to local code considerations
(5) Nominal hear recovery for water inlet temperature of 38˚C (100˚F) and flow rate of 6.3 l/s (100 gpm)
Specifications are not warranted and are subject to change without notice.

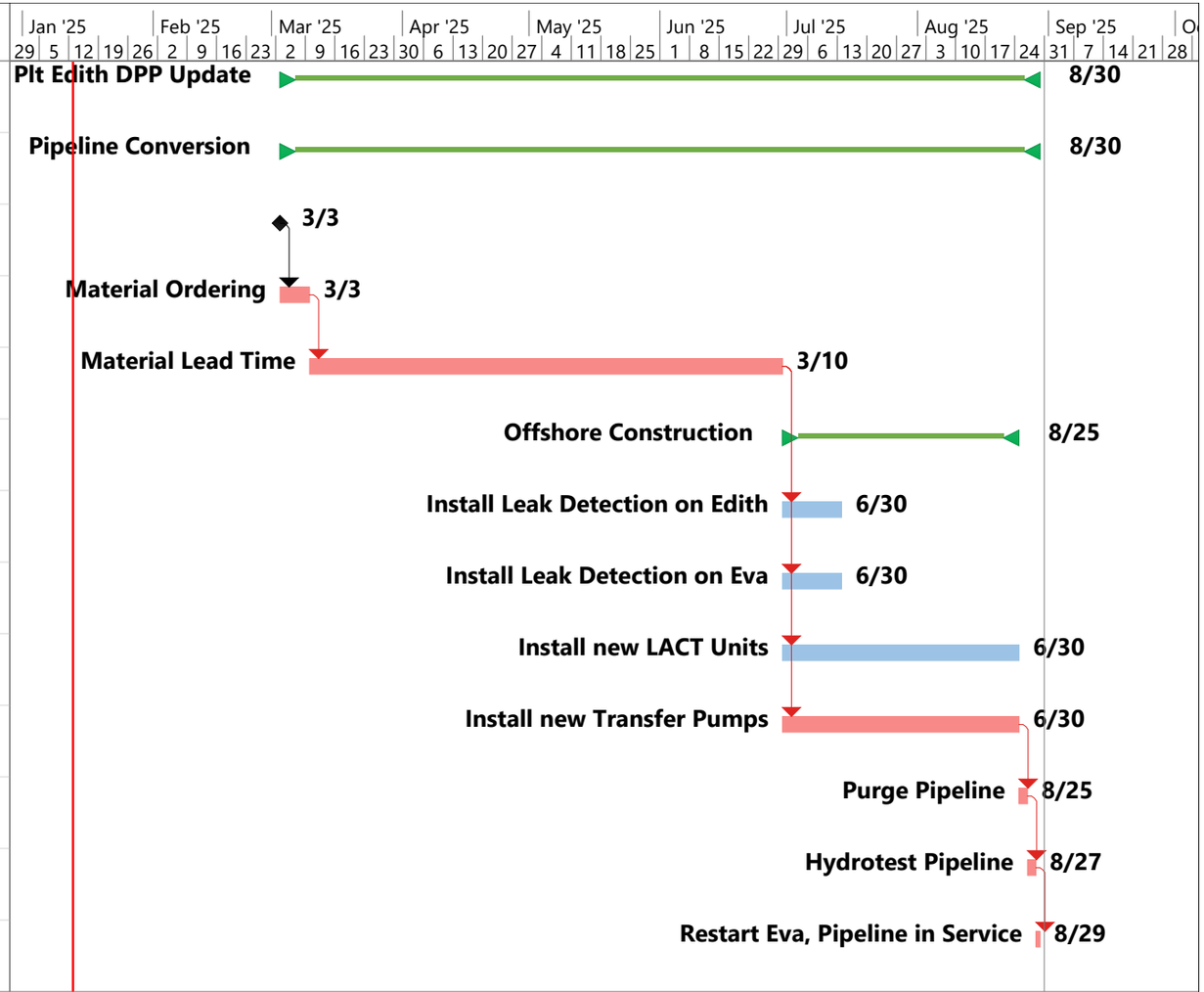
21211 Nordhoff Street | Chatsworth, CA 91311 | 866.422.7786 818.734.5300

www.capstoneturbine.com

APPENDIX C

Pipeline Modification and Conversion Schedule

ID	Task Name	Start	Finish	Actual Days
1	**Plt Edith DPP Update**	**Mon 3/3/25**	**Sat 8/30/25**	**180**
2	**Pipeline Conversion**	**Mon 3/3/25**	**Sat 8/30/25**	**180**
3	**Day Zero**	Mon 3/3/25	Mon 3/3/25	0
4	Material Ordering	Mon 3/3/25	Mon 3/10/25	7
5	Material Lead Time	Mon 3/10/25	Mon 6/30/25	112
6	Offshore Construction	Mon 6/30/25	Mon 8/25/25	56
7	Install Leak Detection on Edith	Mon 6/30/25	Mon 7/14/25	14
8	Install Leak Detection on Eva	Mon 6/30/25	Mon 7/14/25	14
9	Install new LACT Units	Mon 6/30/25	Mon 8/25/25	56
10	Install new Transfer Pumps	Mon 6/30/25	Mon 8/25/25	56
11	Purge Pipeline	Mon 8/25/25	Wed 8/27/25	2
12	Hydrotest Pipeline	Wed 8/27/25	Fri 8/29/25	2
13	**Restart Eva, Pipeline in Service**	Fri 8/29/25	Sat 8/30/25	1



Project: 2025 Edith Pipeline Pro
Date: Mon 1/13/25

Task		Inactive Milestone		Start-only		Critical Split	
Split		Inactive Summary		Finish-only		Progress	
Milestone		Manual Task		External Tasks		Manual Progress	
Summary		Duration-only		External Milestone			
Project Summary		Manual Summary Rollup		Deadline			
Inactive Task		Manual Summary		Critical			

APPENDIX D

Worst-Case Discharge Calculation Spreadsheet

WORST CASE DISCHARGE CALCULATION FOR EVA TO EDITH 6" PIPELINE

Component	Units	Eva - Edith	Eva - Ft Apache
Pipeline Length	feet	35,557	27,576
Pipe Thickness	inches	0.344	0.250 / 0.322 / 0.500
Pipe Diameter (outside)	inches	6.625	8.625
Pipe Volume	bbl	1,207	1,607
Pump Rate	bbl/day	7,030	7,030
Shut Down Time	minutes	11	11
Water Depth	ft	130	30
Ambient Pressure	psi	58.05	13.40
Release Volume Fraction		0.17	0.50
Oil Cut	%	25	25

Pipeline Release Volumes

Prior to Shutdown	bbl	54	54
Pipeline Pressure	psi	75	65
Pipeline Oil Total (BSEE WCD)	**bbl**	**65**	**214**
Pipeline Total Fluid (OSPR WCD)	**bbl**	**259**	**857**

	ED	EV
Pipe Pressure	75	65
Depth	130	30
Ambient Pressure	58.0	13.4
ΔP_{rel}	1.29	4.85
Frel	0.17	0.5

Definition	
ΔP_{rel}	f_{rel}
1	0
1.1 – 1.2	0.08
1.2 – 1.5	0.17
1.5 – 2	0.3
2 – 3	0.4
3 – 4	0.47
4 – 5	0.5
5 – 10	0.55
10 – 20	0.64
20 – 30	0.71
30 – 50	0.74
50 – 200	0.76
>200	0.77

APPENDIX E

Air Quality and Greenhouse Gas Emissions Estimate Tables

Platform Edith - SCAQMD Facility ID - 143741

CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS

TABLE 1: Microturbine Specifications and Potential Total Power Output Summary

Equipment ID No.	Description	Classification	Fuel	Rating (kWe)	Potential Operating Hours (hours/year)[1]	Total Potential Power Generated (kWh)	Potential MMBtu[2]	Potential Fuel Consumption (MMscf/year)[3]
D52	Capstone C200 Microturbine No. 1	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
D53	Capstone C200 Microturbine No. 2	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
D54	Capstone C200 Microturbine No. 3	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
D55	Capstone C200 Microturbine No. 4	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
D56	Capstone C200 Microturbine No. 5	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
D57	Capstone C200 Microturbine No. 6	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
D58	Capstone C200 Microturbine No. 7	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
D59	Capstone C200 Microturbine No. 8	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
Proposed	Capstone C200 Microturbine Proposed	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
Proposed	Capstone C200 Microturbine Proposed	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
Proposed	Capstone C200 Microturbine Proposed	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
Proposed	Capstone C200 Microturbine Proposed	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
Proposed	Capstone C200 Microturbine Proposed	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
Proposed	Capstone C200 Microturbine Proposed	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
Proposed	Capstone C200 Microturbine Proposed	Stationary	Natural Gas	200	8,760	1,752,000	18,046	17.69
			Total:	**3,000**	**131,400**	**26,280,000**	**270,684**	**265**

Notes:

1 - Based on 24 hour per day for 365 days per year operations.

2 - Each Capstone C200 Microturbine has a net heat rate (LHV) of 10,300 Btu per kWh, per Capstone Microturbine C200 Package, Product Specification. 2017.

3 - The potential fuel consumption rate is based on natural gas with a heating value of 1,020 Btu/scf.

MMBtu - Million British Thermal Units

kWe - Kilowatts of electrical power

kWh - Kilowatt hours

MMscf - million standard cubic feet

padre associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

Platform Edith - SCAQMD Facility ID - 143741

CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS

TABLE 2: Emissions Summary - Microturbine and Standard Turbine Maximum Potential Emissions Comparison at Maximum Output and Operation Time1

Platform Edith

Eight C200 Microturbines	Potential Operating Hours Per Year	Emissions lbs/year								Emissions tons/year							
		NOx (lbs)	VOC (lbs)	CO (lbs)	PM (lbs)	SO_2 (lbs)	N_2O (lbs)	CH_4 (lbs)	CO_2 (lbs)	NOx (tons)	VOC (tons)	CO (tons)	PM (tons)	SO_2 (tons)	N_2O (tons)	CH_4 (tons)	CO_2 (tons)
Fifteen C200 Microturbines Totaling 3,000 kW[1]	131,400	5,117	2,296	3,577	1,787	159	5.79	2,802	39,341,160	2.56	1.15	1.79	0.893	0.080	0.003	1.401	19,671
														GHG - $MTCO^2E$ conversions[2]	273	27.9	1
														Total GHG Emissions/ $MTCO_2E$	*17,881*		

Electric Power Generation Plant

Standard Natural Gas-Fired Turbines	Potential Operating Hours Per Year	Emissions lbs/year								Emissions tons/year							
		NOx (lbs)	VOC (lbs)	CO (lbs)	PM (lbs)	SO_2 (lbs)	N_2O (lbs)	CH_4 (lbs)	CO_2 (lbs)	NOx (tons)	VOC (tons)	CO (tons)	PM (tons)	SO_2 (tons)	N_2O (tons)	CH_4 (tons)	CO_2 (tons)
Standard Natural Gas Turbines Totaling - 3,000 kW[1]	131,400	86,619	568	22,196	1,787	920	812	2,328	29,775,240	43.31	0.284	11.10	0.893	0.460	0.406	1.164	14,888
														GHG - $MTCO_2E$ conversions[2]	273	27.9	1
														Total GHG Emissions/ $MTCO_2E$	*13,636*		

Comparison Between Microturbine and Standard Turbine Emissions

Comparison	tons/year								
	NOx (tons)	VOC (tons)	CO (tons)	PM (tons)	SO_2 (tons)	N_2O (tons)	CH_4 (tons)	CO_2 (tons)	$MTCO_2E$ (tons)
Change in Potential Emissions Using Microturbine vs Standard Turbine	**-40.8**	0.864	**-9.31**	0.000	**-0.381**	**-0.403**	0.237	4,783	4,245

Notes:

1 - Assumes all ten Microturbines or stanadard turbine run 24 hours a day for 365 days.

2 - Global Warming Potentials (273 for N2O, 27.9 for CH4, and 1 for CO2, Table 7.SM.6, Intergovernmental Panel on Climate Change (IPCC). 2021. Sixth Assessment Report

3 - Percent change is calculated based on the highest emitting scenario.

Bold text indicates that emissions are lower with the Microturbine.

CH_4 - Methane

CO - Carbon Monoxide

CO_2 - Carbon Dioxide

$MTCO_2E$ - Metric tons of carbon dioxide equivalent

NOx - Oxides of Nitrogen

N_2O - Nitrous Oxide

PM - Particulate Matter

ROG - Reactive Organic Gases

SO_2 - Sulfur Dioxide

Platform Edith - SCAQMD Facility ID - 143741
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 3: Emissions Summary - Microturbines Estimated Actual Emissions

Platform Edith - Eight C200 Microturbines

Year	Power Generated (MWh)	Power Generation Capacity Used (%)	Emissions lbs/year								Emissions tons/year							
			NOx (lbs)	VOC (lbs)	CO (lbs)	PM (lbs)	SO_2 (lbs)	N_2O (lbs)	CH_4 (lbs)	CO_2 (lbs)	NOx (tons)	VOC (tons)	CO (tons)	PM (tons)	SO_2 (tons)	N_2O (tons)	CH_4 (tons)	CO_2 (tons)
2017	8,825	63.0%	1,718	771	1,201	600	53.5	1.94	941	13,211,324	0.859	0.386	0.601	0.300	0.027	0.001	0.471	6,606
2018	7,873	56.2%	1,533	688	1,072	535	47.7	1.73	839	11,785,610	0.766	0.344	0.536	0.268	0.024	0.001	0.420	5,893
2019	9,231	65.9%	1,798	807	1,256	628	55.9	2.03	984	13,819,506	0.899	0.403	0.628	0.314	0.028	0.001	0.492	6,910
2020	8,202	58.5%	1,597	717	1,116	558	49.7	1.81	875	12,278,843	0.799	0.358	0.558	0.279	0.025	0.001	0.437	6,139
2021	6,712	47.9%	1,307	586	914	456	40.7	1.48	716	10,048,346	0.653	0.293	0.457	0.228	0.020	0.001	0.358	5,024
2022	18.8	0.1%	3.65	1.640	2.55	1.28	0.114	0.004	2.001	28,095	0.002	0.001	0.001	0.001	0.0001	0.000002	0.0010	14.0
2023	1,633	11.7%	318	142.7	222	111	9.90	0.360	174.2	2,445,179	0.159	0.071	0.111	0.056	0.005	0.0002	0.087	1,223
2024 (As of May 31)	1,056	7.5%	206	92.3	144	71.8	6.40	0.233	112.6	1,581,446	0.103	0.046	0.072	0.036	0.003	0.0001	0.056	791
Average	**6,071**	**43.3%**	**1,060**	**476**	**741**	**370**	**33.0**	**1.20**	**581**	**8,149,794**	**0.53**	**0.238**	**0.370**	**0.185**	**0.016**	**0.001**	**0.290**	**4,075**

Platform Edith - Eight C200 Microturbines

Year	$MTCO_2E$ (tons)		
2017	6,005		
2018	5,357		
2019	6,281		
2020	5,581		
2021	4,567		
2022	12.8		
2023	1,111		
2024 (As of May 31)	719		
Average GHG Emissions/ $MTCO_2E$[1]	**4,131**		
Greenhouse Gas - $MTCO^2E$ conversions[2]	**273**	**27.9**	**1**

Notes:
1 - Average does not include 2024 emissions.
2 - Global Warming Potentials (273 for N2O, 27.9 for CH4, and 1 for CO2, Table 7.SM.6, Intergovernmental Panel on Climate Change (IPCC). 2021. Sixth Assessment Report
Bold text indicates that emissions are lower with the Microturbine.
$MTCO_2E$ - Metric tons of carbon dioxide equivalent

Platform Edith - SCAQMD Facility ID - 143741
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 4: Microturbine Emissions Factors

Turbine	Emissions Factors							
	NOx[1] (lbs/MMBtu)	VOC[1] (lbs/MMBtu)	CO[1] (lbs/MMBtu)	PM[2] (lbs/MMBtu)	SO_2[3] (lbs/MMBtu)	N_2O[3] (lbs/MMBtu)	CH_4[3] (lbs/MMBtu)	CO_2[4] (lbs/MWh)
Stationary C200 Microturbine	0.019	0.0085	0.013	0.007	0.0006	0.0002	0.0104	1,497

Notes:
1 - Microturbine Compliance Source Test Report, DCOR, LLC, Aeros Environmental, Inc. November, 2019 and Stationary Emissions Test, by CMS Monitoring, October 2023
2 - AP-42, Chapter 3.1 Stationary Gas Turbines, Tables 3.1-2a, USEPA, April 2000.
3 - CalEEMod 2022, Appendic G, Table G-4.
4 - Catalog of CHP Technologies, Section 5, Technology Characterization Microtubines, U.S. EPA March 2015
MMBtu - one million British thermal units
MWh - megawatt hour

Platform Edith - SCAQMD Facility ID - 143741
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 5: Standard Turbine Emissions Factors

Turbine	Emissions Factors[1]							
	NOx (lbs/MMBtu)	VOC (lbs/MMBtu)	CO (lbs/MMBtu)	PM (lbs/MMBtu)	SO_2 (lbs/MMBtu)	N_2O lbs/MMBtu)	CH_4 lbs/MMBtu)	CO_2 lbs/MMBtu)
Stationary Turbine	0.320	0.0021	0.082	0.007	0.003	0.003	0.009	110

Notes:
1 - AP 42, Chapter 3.1 Stationary Gas Turbines
MMBtu - one million British thermal units