

April 2021



Shell Compressed Natural Gas Dispensing Station Project

Initial Study/Mitigated Negative Declaration
Final

Prepared for
City of Carson

Prepared by
DUDEK

FINAL

**Initial Study/Mitigated Negative Declaration
and Mitigation Monitoring and Reporting Program
Shell Compressed Natural Gas Dispensing Station Project**

Prepared for:

City of Carson

701 East Carson Street
Carson, California 90745

Contact: Max Castillo, Assistant Planner

Prepared by:

DUDEK

38 N. Marengo Avenue
Pasadena, California 91101

Contact: Patrick Cruz, Environmental Planner

APRIL 2021

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
CEQA	California Environmental Quality Act
City	City of Carson
CNG	Compressed Natural Gas
IS	Initial Study
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
project	Shell Compressed Natural Gas Dispensing Station Project

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1 Introduction

An Initial Study (IS)/Mitigated Negative Declaration (MND) was prepared for the proposed Shell Compressed Natural Gas (CNG) Dispensing Station (project) and made available for public comment for a 30-day public review period from March 11, 2021, through April 9, 2021. In accordance with the California Environmental Quality Act (CEQA) Guidelines, Section 15074(b) (14 CCR 15074(b)), before approving the project, the City of Carson (City), as the lead agency under CEQA, will consider the MND with any comments received during this public review period. Specifically, Section 15074(b) of the CEQA Guidelines (14 CCR 15074(b)) states the following:

Prior to approving a project, the decision-making body of the lead agency shall consider the proposed negative declaration or mitigated negative declaration together with any comments received during the public review process. The decision-making body shall adopt the proposed negative declaration or mitigated negative declaration only if it finds on the basis of the whole record before it (including the initial study and any comments received), that there is no substantial evidence that the project will have a significant effect on the environment and that the negative declaration or mitigated negative declaration reflects the lead agency's independent judgment and analysis.

The agencies and individuals that provided substantive written comments on the environmental issues addressed within the IS/MND during the public review period are listed in Table 1. Although CEQA (California Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (14 CCR 15000 et seq.) do not explicitly require a lead agency to provide written responses to comments received on a proposed IS/MND, the lead agency may do so voluntarily. Individual comments within each communication are numbered so comments can be cross-referenced with responses.

Table 1. Comment Letter Summary

Letter Number	Commenter	Date
1	Gabrieleno Band of Mission Indians/Kizh Nation	March 18, 2021
2	California Department of Transportation <i>Signed: Miya Edmonson, IGR/CEQA Branch Chief</i>	March 24, 2021
3	South Coast Air Quality Management District <i>Signed: Lijin Sun, J.D., Program Supervisor</i>	April 6, 2021
4	Los Angeles County Fire Department <i>Signed: Ronald M. Durbin, Chief, Forestry Division Prevention Services Bureau</i>	April 6, 2021
5	Los Angeles County Sanitation Districts <i>Signed: Adriana Raza, Facilities Planning Department</i>	April 7, 2021
6	Los Angeles County Department of Public Works – Land Development Division <i>Signed: Toan Duong, Civil Engineer</i>	April 13, 2021

Responses to comments are made in the following text to further supplement, clarify, or expand upon information already presented in the IS/MND. These responses do not change the significance determinations made or the severity of potential environmental impacts evaluated in the IS/MND. Section 15073.5(c)(4) of the CEQA Guidelines (14 CCR 15073.5(c)(4)) permits the inclusion of new information within an MND if the additional information “merely clarifies, amplifies, or makes insignificant modifications to the negative declaration.”

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2 Response to Comments

Comment Letter 1



GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Adopt Mitigative Declaration Study / Mitigated Negative Declaration

March 18, 2021

Project Name: Shell Compressed Natural Gas Dispensing Station Project Located 20945 South Wilmington Ave, Carson, CA

We have received your Notice of the Adopt Mitigative Negative Declaration for the Shell Compressed Natural Gas Dispensing Station Project. Our Tribal Government would like to be consulted if any ground disturbance will be conducted for this project.

1-1

Sincerely,
Gabrieleno Band of Mission Indians/Kizh Nation
(1844) 390-0787 Office

Andrew Salas, Chairman
Albert Perez, treasurer I

Nadine Salas, Vice-Chairman
Martha Gonzalez Lemos, treasurer II

Dr. Christina Swindall Martinez, secretary
Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723

www.gabrielenoindians@yahoo.com

gabrielenoindians@yahoo.com

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Response to Comment Letter 1

Gabrieleno Band of Mission Indians/Kizh Nation
March 18, 2021

1-1 This comment is a request from the Gabrieleno Band of Mission Indians/Kizh Nation to be consulted in the event that any ground disturbance were to occur as part of the project.

As discussed in Section 3.18, Tribal Cultural Resources, of the Draft IS/MND, the City consulted with the Gabrieleno Band of Mission Indians/Kizh Nation on February 3, 2021, pursuant to Assembly Bill (AB) 52.

During consultation, the Gabrieleno Band of Mission Indians-Kizh Nation requested that tribal cultural resource monitoring occur during construction activities. Despite the disturbed nature of the project area and the fact that the archaeological sensitivity of the project site is considered to be low, the City expressed its commitment to preserving the integrity of cultural resources and in response to the request for construction monitoring, included within the Draft IS/MND Mitigation Measure (MM-) TCR-1 requiring that a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation be present during construction activities to monitor excavation spoils for potential Tribal Cultural Resources. On March 2, 2021, the Gabrieleno Band of Mission Indians-Kizh Nation and the City concluded consultation.

Consistent with MM-TCR-1, prior to the issuance of grading permits, the project applicant will retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation to monitor ground disturbing activities for potential Tribal Cultural Resources. Refer to Section 3.18, Tribal Cultural Resources, of the Draft IS/MND, for further details.

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SHELL CNG DISPENSING STATION
FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Comment Letter 2

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-0475
FAX (213) 897-1337
TTY 711
www.dot.ca.gov



Making Conservation
a California Way of Life.

March 24, 2021

Max Castillo
City of Carson
701 East Carson Street
Carson, CA 90745

RE: Shell Compressed Natural Gas Dispensing
Station Project – Mitigated Negative
Declaration (MND)
SCH # 2021030299
GTS # 07-LA-2021-03520
Vic. LA-405/PM: 9.511

Dear Max Castillo:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced MND. The proposed Project would involve installation of a compressed natural gas (CNG) dispensing station at an existing ethanol loading facility to enable the conversion of seven delivery trucks from diesel fuel to renewable CNG fuel. The project includes three CNG dispensers, a 20-foot-tall canopy over the dispensers, and a CNG system compound that would include two compressors, one dryer, and three CNG storage tanks. The CNG facility would be supported by a new natural gas pipeline that would connect to an existing pipeline at the Shell Carson Distribution Complex's eastern boundary. The City of Carson is the Lead Agency under the California Environmental Quality Act (CEQA).

2-1

The project is located approximately 850 feet from Interstate 405 (I-405), 1.65 miles from Interstate 710 (I-710), and 2 miles from State Route 91 (SR-91) in Los Angeles County.

From reviewing the MND, Caltrans concurs with the following: "The project would only enable the conversion of exiting delivery trucks from diesel fuel to renewable CNG fuel, no new Vehicle Miles Traveled (VMT) would be generated from the Project. Therefore, impacts would be less than significant."

2-2

The following information is included for your consideration.

The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. Furthermore, Caltrans encourages Lead Agencies to implement Transportation Demand Management (TDM) strategies that reduce VMT and Greenhouse Gas (GHG) emissions. For more TDM options, please refer to:

2-3

- The 2010 *Quantifying Greenhouse Gas Mitigation Measures* report by the California Air Pollution Control Officers Association (CAPCOA), available at <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>, or
- *Integrating Demand Management into the Transportation Planning Process: A Desk Reference*

Provide a safe and reliable transportation network that serves all people and respects the environment.

SHELL CNG DISPENSING STATION
FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Max Castillo
March 24, 2021
Page 2 of 2

(Chapter 8) by the Federal Highway Administration (FHWA), available at
<https://ops.fhwa.dot.gov/publications/fhwahop12035/index.htm>.

Also, any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. Caltrans recommends that the project limit construction traffic to off-peak periods to minimize the potential impact on State facilities. If construction traffic is expected to cause delays on any State facilities, please submit a construction traffic control plan detailing these delays for Caltrans' review.

If you have any questions about these comments, please contact Mayra Jimon, the project coordinator, at Mayra.Jimon@dot.ca.gov, and refer to GTS # 07-LA-2021-03520.

Sincerely,

Miya Edmonson

MIYA EDMONSON
IGR/CEQA Branch Chief
cc: Scott Morgan, State Clearinghouse

↑ 2-3
| Cont.
|
| 2-4
|

"Provide a safe and reliable transportation network that serves all people and respects the environment."

Response to Comment Letter 2

Miya Edmonson, IGR/CEQA Branch Chief
California Department of Transportation
March 24, 2021

- 2-1** This comment serves as an introduction to comments that follow. The City appreciates the California Department of Transportation’s (Caltrans) review of the Draft Initial Study and Mitigated Negative Declaration. This comment provides a synopsis of the project from the Draft IS/MND and does not state a specific concern or question regarding the adequacy of the environmental impact analysis in the Draft IS/MND.
- 2-2** This comment states that Caltrans concurs with the impact determination of less-than-significant for Vehicle Miles Traveled (VMT) discussed in Section 3.17 of the Draft IS/MND. This comment does not identify a specific concern with the adequacy of the Draft IS/MND or raise an issue or comment specifically related to the Draft IS/MND’s environmental analysis. No further response is required.
- 2-3** The commenter provides transportation demand management (TDM) strategy recommendations for incorporation into the project in order to further reduce impacts to VMT and greenhouse gas emissions. This comment does not identify a specific concern with the adequacy of the Draft IS/MND or raise an issue or comment specifically related to the Draft IS/MND’s environmental analysis. As discussed in Sections 3.8 and 3.17 of the Draft IS/MND, the project would result in less-than-significant greenhouse gas emissions and VMT impacts and no additional mitigation measures, including TDM measures, are required. No further response is required.
- 2-4** This comment states that a Caltrans transportation permit will be required for any oversized-transport vehicles on State highways being used to transport heavy construction equipment and/or materials. Should a Caltrans transportation permit be required for the project, the City will ensure that the project applicant complies with all laws and regulations, including those implemented by Caltrans and consistent with the application procedures and requirements according to the Caltrans Transportation Permits - Oversize/Overweight Vehicles website (<https://dot.ca.gov/programs/traffic-operations/transportation-permits/how-to-apply>). This comment does not identify a specific concern with the adequacy of the Draft IS/MND or raise an issue or comment specifically related to the Draft IS/MND’s environmental analysis. No further response is required.

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SENT VIA E-MAIL:
mcastillo@carson.ca.us
Max Castillo, Assistant Planner
City of Carson, Community Development Department
701 East Carson Street
Carson, CA 90745

April 6, 2021

**Mitigated Negative Declaration (MND) for the Proposed
Shell Compressed Natural Gas Dispensing Station Project**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments include information on South Coast AQMD’s permits that the Lead Agency should include in the Final MND.

South Coast AQMD Staff’s Summary of Project Description

The Lead Agency proposes to construct and operate a compressed natural gas (CNG) compound and dispensing station at the existing Shell Carson Distribution facility that will include two compressors, one dryer, three CNG storage tanks, three CNG fuel dispensers, and a 2,700-square-foot fuel canopy on a 16,220-square-foot portion of a 448-acre site (Proposed Project). The Proposed Project will also include construction and operation of a 3,200-linear-foot natural gas pipeline. The Proposed Project is located at 20945 South Wilmington Avenue on the northwest corner of South Wilmington Avenue and East Dominguez Street within the City of Carson. Additionally, the Proposed Project’s location is within the community boundary for the designated AB 617 Wilmington, Carson, West Long Beach community. Construction is anticipated to begin in 2021 and will be completed in four months, with full operations by 2022¹. Once operational, the Proposed Project’s CNG station would enable the conversion of seven existing delivery trucks from diesel to CNG². Based on a review of the MND and aerial photographs, South Coast AQMD staff found that the Proposed Project will be located approximately 540 feet north of existing residential uses³.

3-1

South Coast AQMD Staff’s Summary of the Air Quality Analysis

In the Air Quality Analysis Section of the MND, the Lead Agency quantified the Proposed Project’s construction and operational emissions and compared those emissions to South Coast AQMD’s recommended regional and localized air quality CEQA significance thresholds. Based on the analysis, the Lead Agency found that the Proposed Project’s regional and localized air quality impacts from both construction and operational activities would be less than significant⁴.

¹ MND. Pages 18 to 19.
² MND. Page 1.
³ MND. Page 21.
⁴ MND. Pages 18 to 24.

Max Castillo

April 6, 2021

South Coast AQMD Consultation, Permitting, and CEQA Responsible Agency

The Lead Agency proposes to operate a CNG compound, which will include the following three pieces of equipment that will be used to prepare CNG for dispensing at the facility: one dryer and two compressors. The Lead Agency anticipates that the two compressors will be rated at 250-horsepower⁵. The horsepower rating of the dryer was not made available in the MND. Due to horsepower rating, operation of the compressors, and possibly the dryer, may require permits to construct and operate from South Coast AQMD. As such, the Lead Agency should consult with South Coast AQMD's Engineering and Permitting staff to determine if any permits will be required. If permits from South Coast AQMD are required, the Lead Agency should identify South Coast AQMD as a Responsible Agency in the Final MND (CEQA Guidelines Section 15381). The assumptions used in the air quality analysis in the Final MND will be the basis for evaluating the permit(s) under CEQA and imposing permit conditions and limits. Questions on permits should be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385. For more general information on permits, please visit South Coast AQMD's webpage: <http://www.aqmd.gov/home/permits>.

3-2

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision makers and the public who are interested in the Proposed Project. South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Alina Mullins, Air Quality Specialist, at amullins@aqmd.gov, should you have any questions or wish to discuss these comments.

3-3

Sincerely,

Lijin Sun

Lijin Sun, J.D.

Program Supervisor, CEQA IGR

Planning, Rule Development & Area Sources

LS:AM
LAC210316-04
Control Number

⁵ MND, Page 5.

Response to Comment Letter 3

Lijin Sun, J.D., Program Supervisor, CEQA IGR
South Coast Air Quality Management District
April 6, 2021

- 3-1** This comment serves as an introduction to comments that follow. This comment provides a synopsis of the project and summarizes the air quality analysis from the Draft IS/MND and does not state a specific concern or question regarding the adequacy of the environmental impact analysis in the Draft IS/MND.
- 3-2** This comment advises the City that permits may be required for operation of equipment at the CNG dispensing facility. At the time of preparation of the Draft IS/MND, the exact specifications of the equipment were not yet known, and two diesel-powered compressors were assumed. However, it is now known that the two compressors and dryer would be electrically driven. Therefore, the electrically-driven compressors, dryers, and storage vessels meet the exemption from permit under SCAQMD Rule 219. The Air Quality, Greenhouse Gas Emissions, and Energy analyses have been revised accordingly in Section 3, Errata, of this Final IS/MND. These changes do not change the significance determinations made in these sections, as emissions remain well below applicable thresholds. This comment also requests that the SCAQMD be listed as a responsible agency in the Final IS/MND if permits are required. However, given that no permits are required, SCAQMD is not a responsible agency.
- 3-3** This comment is a concluding comment in which it is requested that the City provide the SCAQMD with written responses to all comments provided. The City will provide responses to comments to the SCAQMD, as well as all other public agency commenters. The comment is noted and no further response is necessary.

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**COUNTY OF LOS ANGELES
 FIRE DEPARTMENT**

1320 NORTH EASTERN AVENUE
 LOS ANGELES, CALIFORNIA 90063-3294
 (323) 881-2401
 www.fire.lacounty.gov

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FIFTH DISTRICT

April 6, 2021

Max Castillo, Assistant Planner
 City of Carson
 Community Development Department
 701 East Carson Street
 Carson, CA 90745

Dear Mr. Castillo:

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION, "SHELL COMPRESSED NATURAL GAS DISPENSING STATION PROJECT," WOULD INVOLVE INSTALLATION OF A COMPRESSED NATURAL GAS DISPENSING STATION AT AN EXISTING ETHANOL LOADING FACILITY TO ENABLE THE CONVERSION OF SEVEN DELIVERY TRUCKS FROM DIESEL FUEL TO RENEWABLE CNG FUEL, LOCATED AT 20945 SOUTH WILMINTON AVENUE, CARSON, FFER 2021002717

The Notice of Intent to Adopt a Mitigated Negative Declaration has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

PLANNING DIVISION:

XV. Public Services, Fire Protection, the sentence under this section should be corrected to state that six fire stations serve the City of Carson, four of which are located within the City.

The title of Table 11 needs to be corrected to state, "Los Angeles County Fire Departments Fire Stations that serve the City of Carson". This should also be corrected under the List of Tables.

For any questions regarding this response, please contact Loretta Bagwell, Planning Analyst, at (323) 881-2404 or Loretta.Bagwell@fire.lacounty.gov.

4-1

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

- | | | | | | | |
|--------------|-------------|------------------|----------------------|----------------------|-----------------------|------------------|
| AGOURA HILLS | CARSON | EL MONTE | INGLEWOOD | LAWDALE | PICO RIVERA | SIGNAL HILL |
| ARTESIA | CERRITOS | GARDENA | IRVINDALE | LOMITA | POMONA | SOUTH EL MONTE |
| AZUSA | CLAREMONT | GLENORA | LA CANADA-FLINTRIDGE | LYNWOOD | RANCHO PALOS VERDES | SOUTH GATE |
| BALDWIN PARK | COMMERCE | HAWAIIAN GARDENS | LA HABRA | MALIBU | ROLLING HILLS | TEMPLE CITY |
| BELL | COVINA | HAWTHORNE | LA MIRADA | MAYWOOD | ROLLING HILLS ESTATES | VERNON |
| BELL GARDENS | CUDAHY | HERMOSA BEACH | LA PUENTE | NORWALK | ROSEMEAD | WALNUT |
| BELLFLOWER | DIAMOND BAR | HIDDEN HILLS | LAKEWOOD | PALMDALE | SAN DIMAS | WEST HOLLYWOOD |
| BRADBURY | DUARTE | HUNTINGTON PARK | LANCASTER | PALOS VERDES ESTATES | SANTA CLARITA | WESTLAKE VILLAGE |
| CALABASAS | | INDUSTRY | | PARAMOUNT | | WHITTIER |

Max Castillo, Assistant Planner
April 6, 2021
Page 2

LAND DEVELOPMENT UNIT:

The County of Los Angeles Fire Department's Fire Prevention, Land Development Unit has no requirements for the proposed Shell Compressed Natural Gas Dispensing Station Project.

The proposed Shell Compressed Natural Gas Dispensing Station Project shall be submitted to the County of Los Angeles Fire Department Petroleum Unit for review and approval. You may contact them at (626) 430-3040 for specific submittal requirements.

Should any questions arise regarding subdivision, water systems, or access, please contact the County of Los Angeles Fire Department Land Development Unit's, Inspector Nancy Rodeheffer at (323) 890-4243.

4-2

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed.

Under the Los Angeles County Oak tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage or encroach into the protected zone of any tree of the Oak genus which is 25 inches or more in circumference (eight inches in diameter), as measured 4 1/2 feet above mean natural grade.

If Oak trees are known to exist in the proposed project area further field studies should be conducted to determine the presence of this species on the project site.

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

For any questions regarding this response, please contact Forestry Assistant, Joseph Brunet at (818) 890-5719.

4-3

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments or requirements for the project at this time.

Please contact HHMD senior typist-clerk, Perla Garcia at (323) 890-4035 or Perla.garcia@fire.lacounty.gov if you have any questions.

If you have any additional questions, please contact this office at (323) 890-4330

4-4

Max Castillo, Assistant Planner
April 6, 2021
Page 3

Very truly yours,



RONALD M. DURBIN, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

RMD:ac

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Response to Comment Letter 4

Ronald M. Durbin, Chief, Forestry Division, Prevention Services Bureau
Los Angeles County Fire Department
April 6, 2021

- 4-1** This comment from the Planning Division of the Los Angeles County Fire Department (LACFD) states that there are six fire stations that serve the City of Carson, four of which are located in the City, as opposed to six being located within the City. The comment states that the title of Table 11, Los Angeles County Fire Departments in the City of Carson, should be changed to “Los Angeles County Fire Departments Fire Stations that serve the City of Carson”. These corrections are implemented in Section 3, Errata, of this Final IS/MND. Note that these changes are minor and do not affect the determination that the project would result in a less-than-significant impact with regard to the construction or expansion of fire protection facilities, as discussed in Section 3.15, Public Services, of the Draft IS/MND. No further response is necessary or required.
- 4-2** This comment states that the proposed project shall be submitted to the LACFD Petroleum Unit for review and approval. The project applicant has coordinated with the LACFD Petroleum unit and after review, the LACFD Petroleum unit has approved the project’s plans.
- 4-3** This comment lists the statutory responsibilities of the LACFD Forestry Division. The comment states that under the Los Angeles County Oak Tree Ordinance, a permit is required to cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak genes that is 25 inches or more in circumference, as measured 4.5 feet above mean natural grade. The comment states that if oak trees are known to exist in the project area, further field studies should be conducted to determine the presence of oak species in the project area.
- The project’s potential impacts to biological resources were evaluated in detail in a Biological Resources Assessment prepared by AECOM in November 2020 (Appendix B of the Draft IS/MND). The Biological Resources Assessment involved a survey of the project site plus a 500-foot buffer surrounding the project site, referred to as the biological survey area. During the survey, no oak trees were identified and thus, the project would have no impact on oak species.
- 4-4** This comment states that the Health Hazardous Materials Division of the LACFD has no comments regarding the proposed project. This comment also provides contact information for the LACFD. No further response is necessary or required.

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Comment Letter 5



Robert C. Ferrante
Chief Engineer and General Manager
1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

April 7, 2021
Ref. DOC 6101259

Mr. Max Castillo, Assistant Planner
Community Development Department
City of Carson
701 East Carson Street
Carson, CA 90745

Dear Mr. Castillo:

NOI Response for Shell Compressed Natural Gas Dispensing Station Project

The Los Angeles County Sanitation Districts (Districts) received a Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) for the subject project on March 15, 2021. The proposed project is located within the jurisdictional boundary of District No. 8. We offer the following comment:

- The proposed project may require an amendment to a Districts' permit for Industrial Wastewater Discharge. Project developers should contact the Districts' Industrial Waste Section at (562) 908-4288, extension 2900, in order to reach a determination on this matter. If this update is necessary, project developers will be required to forward copies of final plans and supporting information for the proposed project to the Districts for review and approval before beginning project construction.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717 or at araza@lacsd.org.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: L. Smith

5-1

DOC 6136731.D08

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Response to Comment Letter 5

**Adriana Raza, Customer Service Specialist, Facilities Planning Department
Los Angeles County Sanitation District
April 7, 2021**

5-1 This comment states that the project is located within the jurisdictional boundary of District No. 8 of the Los Angeles County Sanitation District (LACSD), and the project may require an amendment to the applicant's existing wastewater discharge permit.

As discussed in Section 3.19, Utilities, of the Draft IS/MND, the project would not result in the generation of wastewater that would be discharged into the LACSD's Publicly Owned Treatment Works and no modification of the applicant's Industrial Wastewater Permit would be required for such activities. As discussed in Section 3.10, Hydrology and Water Quality, of the Draft IS/MND, stormwater flows at the project site would be managed in the same way that stormwater is managed within the entire 448-acre Shell Carson Distribution Complex. Currently, during most storm events, storm water is typically impounded and allowed to evaporate/percolate. Under the Industrial Wastewater Permit, the facility is allowed to discharge up to 5,000 gallons per minute during dry weather and 750 gallons per minute during applicable storm conditions with a 225,000 gallons per day daily average flow limit. Storm water discharges to the Publicly Owned Treatment Works are monitored in accordance with permit requirements to ensure applicable permit limitations are met. Pursuant to the Industrial Wastewater Permit, revisions are only necessary when the quantity or quality of wastewater changes by more than 25% (LACSD 2021).

As discussed in Section 3.10, although the project would result in some change to the existing drainage pattern and runoff generation rates of the site, the new proposed surfaces (i.e., CNG compound laydown and concrete pipe rack footings) would be minor and are of such a small size (i.e., less than half an acre in the context of the approximately 448 acre site) that the existing stormwater system would be able to accommodate any runoff from the project. As such, the project would not increase the quantity or quality of wastewater discharged at the Shell Carson Distribution complex by more than 25%.

As a result of this comment, the project applicant consulted with the LACSD to confirm that the project would not require a modification to the project applicant's Industrial Wastewater Permit. On April 14, 2021, Karen Luo of the LACSD confirmed that no permit modification would be required as a result of the project (Luo, pers. coms., 2021)

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Comment Letter 6

From: Toan Duong
Sent: Tuesday, April 13, 2021 3:53 PM
To: Max Castillo
Cc: Justin Dulay; Aracely Lasso; Nilda Gemeniano
Subject: NOI/MND Shell Compressed Natural Gas Dispensing Station Comments

TO: Max Castillo
City of Carson
Community Development Department
701 East Carson Street

Dear Mr. Castillo,

**ENVIRONMENTAL PLAN (RPPL2021003887)
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
SHELL COMPRESSED NATURAL GAS DISPENSING STATION PROJECT
COUNTY UNINCORPORATED COMMUNITY OF CARSON**

Thank you for the opportunity to review the Initial Study/Mitigated Negative Declaration (IS/MND) for the subject project. The project proposes to install a compressed natural gas (CNG) dispensing station at an existing ethanol loading facility to enable the conversion of seven delivery trucks from diesel fuel to renewable CNG fuel. Public Works has the following comments for your consideration.

6-1

1. The Los Angeles County Building Code, Section 110.4 requires that buildings or structures adjacent to or within 300 feet (60.96 m) of active, abandoned or idle oil or gas well(s) be provided with methane gas protection systems. If the project site contains or lies within 300 feet of active, abandoned or idle oil or gas wells, this issue should be addressed, and mitigation measure provided. Contact Public Works, Environmental Programs Division at (626) 458-2193 for issuance of necessary permits.

6-2

2. The Los Angeles County Building Code, Section 110.3, requires that a building or structure located on or within 1,000 feet (304.8 m) of a landfill containing decomposable material must be protected against landfill gas intrusion. The project site appears to be located on or within 1,000 feet of the Cal Compact Landfill. This issue should be addressed, and mitigation measures provided. The discussion should include subsurface lateral migration of landfill gas, migration detection, and control and protection systems for affected enclosed buildings and structures. Contact Environmental Programs Division at (626) 458-2193 for issuance of necessary permits.

6-3

3. Should any operation within the subject project include the construction, installation, modification or removal of underground storage tanks (Los Angeles County Code [LACC] Title 11, Division 4), industrial waste treatment or disposal facilities, and/or storm water treatment facilities, Public Works, Environmental Programs Division must be contacted for required approvals and operating permits. Specific industry types will also be subject to registration and inspections related to implementation of best management practices to prevent stormwater related pollution (LACC Title 12, Chapter 12.80).

6-4

SHELL CNG DISPENSING STATION
FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Visit pw.lacounty.gov/epd/Stormwater/inspection.cfm online or contact Public Works, Environmental Program Division at (626) 458-3517 for permit information.
For questions regarding comments 1 to 3, please contact Nilda Gemeniano of Public Works, Environmental Programs Division, at (626) 418-1550 or ngemenia@pw.lacounty.gov.

6-5

We request that all future environmental documents and notices be sent to Aracely Lasso of Public Works, Land Development Division at (626) 458-4921 or alasso@pw.lacounty.gov. If you have any other questions or require additional information, please contact the undersign at (626) 458-4921 or tduong@pw.lacounty.gov.

Regards,

Toan Duong

Civil Engineer
Los Angeles County Public Works
Office: (626) 458-4921



Response to Comment Letter 6

Tom Duong, Civil Engineer
Los Angeles County Department of Public Works – Land Development Division
April 13, 2021

- 6-1** This comment serves as an introduction to comments that follow. The City appreciates the Los Angeles County Department of Public Works' (LACDPW) review of the Draft Initial Study and Mitigated Negative Declaration. This comment provides a synopsis of the project from the Draft IS/MND and does not state a specific concern or question regarding the adequacy of the environmental impact analysis in the Draft IS/MND.
- 6-2** This comment states that pursuant to Los Angeles County Building Code, Section 110.4, buildings or structures adjacent to or within 300 feet of active, abandoned, or idle oil or gas well(s) be provided with methane gas protection systems. A review of the Geologic Energy Management Division's well finder online mapping application indicates that there not any abandoned or idle oil or gas wells within 300 feet of the project site.
- 6-3** This comment states that pursuant to Los Angeles County Building Code, Section 110.3, building or structure located on or within 1,000 feet (304.8 m) of a landfill containing decomposable material must be protected against landfill gas intrusion. The comment states that the project site appears to be located on or within 1,000 feet of Cal Compact Landfill. However, the project site is located approximately 5,400 feet away from the Cal Compact Landfill. The Gardena Valley Landfill No. 6 is located adjacent to the Shell Carson Distribution Complex's western boundary; however, the project site within the Shell Carson Distribution Complex is located approximately 3,200 feet away from the Gardena Valley Landfill No. 6. No other landfills are located within the vicinity of the project site (CalRecycle 2021).
- 6-4** This comment states that pursuant to Title 11 of the Los Angeles County Code, the LACDPW Environmental Programs Division should be contacted for approvals and operating permits for the construction, installation, modification or removal of underground storage tanks, industrial waste treatment or disposal facilities, and/or storm water treatment facilities. The project would not involve the construction, installation, modification or removal of underground storage tanks, industrial waste treatment or disposal facilities, and/or storm water treatment facilities (see Response to Comment 5-1 for a discussion of stormwater).
- 6-5** This comment provides contact information for additional departments within LACDPW that may be helpful to the project applicant during the project development process. Additionally, the comment requests that all future environmental documents and notices be sent to LACDPW. The City will provide responses to comments to LACDPW, as well as all other public agency commenters. The comment is noted and no further response is necessary.

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3 Errata

Changes to the Draft Initial Study/Mitigated Negative Declaration (IS/MND) are noted below. An underline indicated additions to the text; ~~strikethrough~~ indicates deletions to the text. Changes have been analyzed and responded to in Section 2, Response to Comments, of this Final IS/MND. The changes to the Draft IS/MND do not affect the overall conclusions of the environmental document. Changes are listed by page and, where appropriate, by paragraph.

These errata address the technical comments on the Draft IS/MND, which circulated from March 11, 2021, through April 9, 2021. These clarifications and modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft IS/MND. All mitigation measure modifications, if any, have been reflected in Section 4.0, Mitigation Monitoring and Reporting Program, of this Final IS/MND.

The Errata noted below are global Errata and apply to the entirety of the Draft IS/MND. At the time of preparation of the Draft IS/MND the exact specifications of the equipment were not yet known, and a diesel-powered compressor and dryer were assumed. However, it is now known that these pieces of equipment would be electrically driven. The Air Quality and Greenhouse Gas Emission analyses have been revised accordingly. These clarifications or modifications are based upon applicable updated information that was not available at the time of the Draft IS/MND publication.

Section 2.0, Project Description

Page 4, Section 2.4 Proposed Project

The CNG dispensing station would include three CNG dispensers, an approximately 2,700-square-foot, 20-foot-tall canopy over the dispensers, and a CNG system that would include two compressors, one dryer, and three CNG storage tanks. The compressors and dryer of this project would be electrically driven. Approximately 16,220 square feet of new concrete and asphalt would be laid to support the CNG system compound and new dispensers.

Section 3.3, Air Quality

Pages 19-20, Operational Emissions

Operation of the project would produce VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from ~~stationary sources~~, area sources, and use of consumer products. Emissions of criteria air pollutants were estimated using CalEEMod. Project buildout was assumed to occur in 2022.

The project was assumed to generate a net-zero number of daily trips. Therefore, no emissions from mobile sources were estimated. CalEEMod was used to estimate emissions from the area sources, which include use of consumer products and architectural coatings for maintenance of structures and parking areas. The estimated operational area-source emissions were based on land use defaults of the project. ~~CalEEMod was also used to calculate emissions associated with the two 250 horsepower CNG compressors. It was conservatively assumed that the compressors would operate on site for 8 hours a day.~~

Table 3. Estimated Daily Maximum Operational Emissions (2022)

Emissions Source	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
	Pounds per Day					
Area	0.02	0.00	<0.01	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Off Road Equipment	1.08	6.84	4.66	0.03	0.22	0.22
Total Emissions	1.10 0.02	6.84 0.00	4.66 <0.01	0.03 0.00	0.22 0.00	0.22 0.00
SCAQMD Pollutant Threshold	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Source: See Appendix A for complete results.

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter

Section 3.8, Greenhouse Gas Emissions

Page 41-42, Operational Emissions

CalEEMod Version 2016.3.2 was used to estimate potential project-generated operational GHG emissions from area sources (landscape maintenance) and electricity use (canopy lighting, two compressors, and dryer) stationary sources (CNG compressors). It was assumed that the two compressors would operate 2,920 hours per year and the dryer would operate 96 hours per year. Because the project would be located at an existing fueling site, no ancillary building structures that would require energy are associated with the project. For additional details, see Section 3.3 for a discussion of operational emission calculation methodology and assumptions. Year 2022 was assumed as the first full year of operations after project construction. Table 6 presents the annual GHG emissions associated with operation of the project. Additional details are included in Appendix A.

Table 6. Estimated Annual Operational Greenhouse Gas Emissions

Emission Source	CO ₂	CH ₄	N ₂ O	CO ₂ e
	Metric Tons per Year			
Area	<0.01	0	0	<0.01
Energy	0 353.32	0 0.01	0 <0.01	0 354.59
Mobile	0.00	0	0	0.00
Stationary Sources	389.26	0.02	0	398.68
Total	389.26 353.32	0.02 0.01	0 <0.01	398.68 354.59
<i>Amortized Construction Emissions</i>				7.34
Operation + Amortized Construction Total				406.03 361.93

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent
 See Appendix A for detailed results.

Values of “<0.01” indicate that the estimated emissions are less than two decimals. Totals may not sum due to rounding.

As shown in Table 6, the estimated annual project-generated GHG emissions would be approximately ~~399~~ 355 MT CO₂e per year as a result of project operation. When summed with the amortized project construction emissions,

the total annual GHGs would be approximately ~~406,362~~ MT CO₂e per year. Annual operational GHG emissions with amortized construction emissions would not exceed the SCAQMD threshold of 10,000 MT CO₂e per year. Therefore, the project’s GHG contribution would not be cumulatively considerable and impacts would be less than significant.

Section 3.6, Energy

Page 34, Operational Energy Use

As discussed in Section 1.1, Project Overview, the project would provide a CNG fueling station at the Shell Carson Distribution Terminal and would enable the conversion of up to seven diesel-powered trucks to use CNG fuel. Additionally, as discussed in Section 1.1, the project site is limited to an average of 195 trucks per day. Therefore, the addition of the CNG fueling station would not induce additional truck travel to and from the project site. The project would minimally increase the amount of CNG usage at the project site. In addition, the project would increase operational electricity use due to operation of canopy lighting, two compressors, and one dryer, resulting in electricity consumption of 1,108,761 kilowatt-hours per year. However, the project would reduce the reliance on fossil fuels and reduce air quality and GHG emissions by allowing for CNG-fueled trucks to replace existing diesel trucks also reduce the amount of petroleum (diesel fuel) used on site. Given these considerations, ~~petroleum and natural gas and electricity~~ consumption associated with the project would not be considered inefficient or wasteful, and impacts would be less than significant.

Section 3.15, Public Services

Page 61-62, Fire Protection

Fire services for the City of Carson is provided by the Los Angeles County Fire Department (City of Carson 2000), which ~~has six stations located within the City~~ is served by six fire stations, four of which are located within the City of Carson (see Table 11).

Table 11. Los Angeles County Fire Departments in the Fire Stations that serve the City of Carson

Station Number	Address
Fire Station 10	1860 E. Del Amo Boulevard
Fire Station 36	127 W. 223rd Street
Fire Station 95	127 Redondo Beach Boulevard
Fire Station 105	18915 South Santa Fe Avenue
Fire Station 116	755 E. Victoria Street
Fire Station 127	2049 E. 223rd Street

Source: City of Carson 2000

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4 Mitigation Monitoring and Reporting Program

The California Environmental Quality Act (CEQA) requires that a public agency adopting a Mitigated Negative Declaration (MND) take affirmative steps to determine that approved mitigation measures are implemented after project approval. The lead or responsible agency must adopt a reporting and monitoring program for the mitigation measures incorporated into a project or included as conditions of approval. The program must be designed to ensure compliance with the MND during project implementation (California Public Resources Code, Section 21081.6(a)(1)).

This Mitigation Monitoring and Reporting Program (MMRP) will be used by the City of Carson (City) to ensure compliance with adopted mitigation measures identified in the MND for the proposed Shell Compressed Natural Gas Dispensing Station Project (project) when construction begins. The City, as the lead agency, will be responsible for ensuring that all mitigation measures are carried out. Implementation of the mitigation measures would reduce impacts to below a level of significance for air quality, cultural resources, geology and soils, hazards and hazardous materials, noise, transportation, and tribal cultural resources.

The remainder of this MMRP consists of a table that identifies the mitigation measures by resource for each project component. Table 1 identifies the mitigation monitoring and reporting requirements, list of mitigation measures, party responsible for implementing mitigation measures, timing for implementation of mitigation measures, agency responsible for monitoring of implementation, and date of completion. With the MND and related documents, this MMRP will be kept on file at the following location:

City of Carson
Community Development Department, Planning Division
710 East Carson Street
Carson, California 90745

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Table 2. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Party Responsible For Implementation	Party Responsible For Monitoring	Date of Completion/Notes
Biological Resources				
MM-BIO-1: Prior to construction, a qualified biologist shall conduct a pre-construction survey within 30 days of the project start date to identify special-status species, including Crotch bumble bee, southern tarplant, burrowing owl, and roosting bats, within the project site. The qualified biologist shall remain alert for the presence of any other special-status species. If a special-status species is detected during pre-construction surveys, avoidance buffers shall be established, and biological monitoring shall be conducted during construction activities to avoid impacts to these resources.	Prior to construction	Project Applicant	City of Carson	
MM-BIO-2: If construction activities are scheduled to occur between February 15 and September 1 (i.e., nesting bird season), a nesting bird survey shall be conducted within 7 days prior to the start of construction to detect active nests for birds protected by the Migratory Bird Treaty Act and special-status avian species with potential to occur, including, but not limited to, Cooper’s hawk, California horned lark, and loggerhead shrike. If special-status species or nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code are detected during pre-construction surveys, avoidance buffers shall be established, and biological monitoring shall be conducted during construction activities to avoid impacts to these resources.	Prior to construction	Project Applicant	City of Carson	
Cultural Resources				
MM-CUL-1: A qualified archaeological monitor shall be present for excavation activities that extend 3 feet or more below current ground surface (e.g., precast concrete trenches beneath the existing driveways and canopy footings). The archaeological monitor shall have the authority to stop ground-disturbing activities to assess any discoveries made in the field. As construction continues, the qualified monitor may	During construction	Project Applicant and their construction contractor	City of Carson	

Table 2. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Party Responsible For Implementation	Party Responsible For Monitoring	Date of Completion/Notes
<p>recommend that monitoring be reduced if, at the maximum depth of ground disturbance, it is determined that the subsurface has previously been disturbed or otherwise shows no evidence of being sensitive for cultural resources. Monitors must adhere to all site HSSE (Health, Safety, Security, Environmental) rules. Monitors will need to be available with 3 business days' notice of when ground disturbance will occur.</p> <p>In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist can evaluate the significance of the find and determine whether additional study is warranted. If the resources are determined to be Native American in origin, Native American tribes who consider the project area to be within their Tradition Use Area shall be consulted on the significance of the find and appropriate treatment. Depending on the significance of the find under the California Environmental Quality Act (CEQA) and the CEQA Guidelines (California Public Resources Code, Section 21082; 14 CCR 15064.5[f]), the qualified archaeologist may exhaust the data potential of the find through the process of field level recordation and then allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery, may be warranted.</p>				
<p>MM-CUL-2: If human remains are discovered during construction of the project, California Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner shall be contacted. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur</p>	<p>During construction</p>	<p>Project Applicant and their construction contractor</p>	<p>City of Carson</p>	

Table 2. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Party Responsible For Implementation	Party Responsible For Monitoring	Date of Completion/Notes
<p>until the County Coroner has determined, within two working days of notification of discovery, the appropriate treatment and disposition of the human remains.</p> <p>Pursuant to California Public Resources Code Section 5097.98, if the remains are thought to be Native American, the County Coroner shall notify the Native American Heritage Commission, which shall then notify the most likely descendent. At this time, the person who discovered the remains shall contact the City of Carson (City) so that the City may work with the most likely descendent on the respectful treatment and disposition of the remains. Additional provisions of the California Public Resources Code Section 5097.98 are to be followed as applicable.</p>				
Geology and Soils				
<p>MM-GEO-1: In the event that paleontological resources (fossil remains) are exposed during construction activities for the project, all construction work occurring within 50 feet of the find shall immediately stop until a qualified paleontologist, as defined by the Society of Vertebrate Paleontology’s 2010 guidelines, can assess the nature and importance of the find. Depending on the significance of the find, the paleontologist may record the find and allow work to continue or recommend salvage and recovery of the resource. All recommendations shall be made in accordance with the Society of Vertebrate Paleontology’s 2010 guidelines and shall be subject to review and approval by the City of Carson. Work in the area of the find may only resume upon approval of a qualified paleontologist.</p>	During construction	Project Applicant and their construction contractor	City of Carson	
Hazards and Hazardous Materials				
<p>MM-HAZ-1: Prior to the start of grading or soil excavation, a Construction Contaminated Soils Management Plan (SMP) that addresses the identification, sampling, characterization, handling, segregation, storage, and disposal of contaminated</p>	Prior to construction	Project Applicant	City of Carson	

Table 2. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Party Responsible For Implementation	Party Responsible For Monitoring	Date of Completion/Notes
soils in compliance with local, state, and federal regulations shall be prepared and implemented. The SMP shall contain a pre-excavation sampling plan and state the mechanism(s) used to identify impacted soils during the actual excavations. A communication and notification process shall be included in the SMP to ensure the appropriate agency or agencies are notified in accordance with local, state, and federal requirements.				
<i>Tribal Cultural Resources</i>				
<p>MM-TCR-1: Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill 52 (the “Tribe” or the “Consulting Tribe”). A copy of the executed contract shall be submitted to the City of Carson Planning and Building Department prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal monitor will only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribe as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area.</p> <p>The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when all ground-disturbing activities on the Project site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the</p>	During construction	Project Applicant and their construction contractor	City of Carson	

Table 2. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Party Responsible For Implementation	Party Responsible For Monitoring	Date of Completion/Notes
<p>Project Site have little to no potential for impacting Tribal Cultural Resources.</p> <p>Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 100 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by project activities shall be evaluated by the qualified archaeologist and Tribal monitor approved by the Consulting Tribe. If the resources are Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes.</p> <p>If human remains and/or grave goods are discovered or recognized at the Project Site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue on other parts of the Project Site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]).</p> <p>If a non-Native American resource is determined by the qualified archaeologist to constitute a “historical resource” or “unique archaeological resource,” time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, must be available. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and PRC Sections 21083.2(b) for unique archaeological resources. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of</p>				

Table 2. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Timing	Party Responsible For Implementation	Party Responsible For Monitoring	Date of Completion/Notes
<p>archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.</p> <p>The tribal monitor and any other site visitors must adhere to all site HSSE (Health, Safety, Security, Environmental) rules including COVID precaution measures.</p>				

5 References Cited

14 CCR 15000–15387 and Appendices A through L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

CalRecycle. 2021. Solid Waste Information System Facility/Site Search. April 2021.
<https://www2.calrecycle.ca.gov/SolidWaste/Site/Search/>.

CDOC (California Department of Conservation) 2021. Geologic Energy Management Division's (CalGEM) Online Well Finder. Accessed April 2021. <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.27689/33.83819/14>.

Luo, K. 2021. Industrial Wastewater Permit Information. Telephone conversation between Liu, K. (Los Angeles County Sanitation Districts) to Sherman, S. (Equilon Enterprises LLC d/b/a Shell Oil Products US). April 14, 2021.

LACSD (Los Angeles County Sanitation Districts). 2021. Instructions for Obtaining an Industrial Wastewater Discharge Permit. Accessed April 2021.
https://www.lacsd.org/services/wastewater/industrial_waste/permit.asp.

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6 List of Preparers

City of Carson

Max Castillo, Assistant Planner

Dudek (Environmental Consultant)

Tamseel Mir, Program Manager

Jason Reynolds, Senior Environmental Planner and QA/QC

Patrick Cruz, Environmental Planner

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Appendix A

Revised CalEEMod Inputs and Outputs

Shell CNG Truck Station - South Coast AQMD Air District, Annual

Shell CNG Truck Station
South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.36	59,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Shell CNG Truck Station - South Coast AQMD Air District, Annual

Project Characteristics - Construction Start date: March 1st 2021

Land Use - A

Construction Phase - a

Off-road Equipment -

Off-road Equipment - a

Off-road Equipment - A

Off-road Equipment - a

Trips and VMT - A

Grading -

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment - a

Energy Use - Electricity use from canopy lighting, compressors, and dryer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	3,558.00	2,614.00
tblAreaCoating	Area_Parking	3558	2614
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	79.00
tblConstructionPhase	NumDays	4.00	79.00
tblConstructionPhase	NumDays	10.00	79.00
tblEnergyUse	NT24E	0.00	18.70
tblLandUse	LandUseSquareFeet	43,560.00	59,300.00
tblLandUse	LotAcreage	1.00	1.36
tblOffRoadEquipment	HorsePower	89.00	0.00
tblOffRoadEquipment	HorsePower	84.00	0.00
tblOffRoadEquipment	HorsePower	187.00	0.00

Shell CNG Truck Station - South Coast AQMD Air District, Annual

tbloffRoadEquipment	HorsePower	130.00	0.00
tbloffRoadEquipment	HorsePower	132.00	0.00
tbloffRoadEquipment	HorsePower	80.00	0.00
tbloffRoadEquipment	HorsePower	247.00	0.00
tbloffRoadEquipment	HorsePower	97.00	0.00
tbloffRoadEquipment	LoadFactor	0.20	0.00
tbloffRoadEquipment	LoadFactor	0.74	0.00
tbloffRoadEquipment	LoadFactor	0.41	0.00
tbloffRoadEquipment	LoadFactor	0.42	0.00
tbloffRoadEquipment	LoadFactor	0.38	0.00
tbloffRoadEquipment	LoadFactor	0.40	0.00
tbloffRoadEquipment	LoadFactor	0.37	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tbloffRoadEquipment	UsageHours	6.00	0.00
tbloffRoadEquipment	UsageHours	8.00	0.00
tbloffRoadEquipment	UsageHours	6.00	0.00
tbloffRoadEquipment	UsageHours	6.00	0.00

Shell CNG Truck Station - South Coast AQMD Air District, Annual

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	10.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

Shell CNG Truck Station - South Coast AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	0.2455	0.2455
2	6-1-2021	8-31-2021	1.1964	1.1964
		Highest	1.1964	1.1964

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.4400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	353.3225	353.3225	0.0146	3.0200e-003	354.5865
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.4400e-003	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	353.3225	353.3225	0.0146	3.0200e-003	354.5865

Shell CNG Truck Station - South Coast AQMD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.4400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	353.3225	353.3225	0.0146	3.0200e-003	354.5865
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.4400e-003	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	353.3225	353.3225	0.0146	3.0200e-003	354.5865

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Grading	5/13/2021	8/31/2021	5	79	
2	CNG Compound Installation	Building Construction	5/13/2021	8/31/2021	5	79	
3	Paving	Paving	5/13/2021	8/31/2021	5	79	
4	Architectural Coating	Architectural Coating	7/19/2021	7/23/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.36

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,614 (Architectural Coating – sqft)

OffRoad Equipment

Shell CNG Truck Station - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Cranes	1	8.00	231	0.29
Trenching	Graders	0	0.00	0	0.00
Trenching	Rubber Tired Dozers	0	0.00	0	0.00
Trenching	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
CNG Compound Installation	Cranes	1	6.00	231	0.29
CNG Compound Installation	Excavators	1	8.00	158	0.38
CNG Compound Installation	Forklifts	0	0.00	0	0.00
CNG Compound Installation	Generator Sets	0	0.00	0	0.00
CNG Compound Installation	Skid Steer Loaders	1	8.00	65	0.37
CNG Compound Installation	Tractors/Loaders/Backhoes	0	0.00	0	0.00
CNG Compound Installation	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	0	0.00	0	0.00
Paving	Paving Equipment	0	0.00	0	0.36
Paving	Plate Compactors	2	8.00	8	0.43
Paving	Rollers	0	0.00	0	0.00
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	6	26.00	20.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
CNG Compound Installation	5	26.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	26.00	12.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0706	0.4955	0.4280	7.4000e-004		0.0234	0.0234		0.0224	0.0224	0.0000	59.1952	59.1952	0.0134	0.0000	59.5302
Total	0.0706	0.4955	0.4280	7.4000e-004	0.0000	0.0234	0.0234	0.0000	0.0224	0.0224	0.0000	59.1952	59.1952	0.0134	0.0000	59.5302

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3.2 Trenching - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0104	2.2100e-003	3.0000e-005	6.9000e-004	3.0000e-005	7.2000e-004	1.9000e-004	3.0000e-005	2.2000e-004	0.0000	2.9868	2.9868	2.0000e-004	0.0000	2.9919
Vendor	2.2500e-003	0.0764	0.0190	2.0000e-004	4.9800e-003	1.5000e-004	5.1300e-003	1.4400e-003	1.5000e-004	1.5800e-003	0.0000	19.2876	19.2876	1.2200e-003	0.0000	19.3181
Worker	4.2800e-003	3.1600e-003	0.0358	1.1000e-004	0.0113	8.0000e-005	0.0114	2.9900e-003	8.0000e-005	3.0700e-003	0.0000	9.8146	9.8146	2.6000e-004	0.0000	9.8212
Total	6.8200e-003	0.0900	0.0570	3.4000e-004	0.0169	2.6000e-004	0.0172	4.6200e-003	2.6000e-004	4.8700e-003	0.0000	32.0890	32.0890	1.6800e-003	0.0000	32.1312

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0706	0.4955	0.4280	7.4000e-004		0.0234	0.0234		0.0224	0.0224	0.0000	59.1951	59.1951	0.0134	0.0000	59.5301
Total	0.0706	0.4955	0.4280	7.4000e-004	0.0000	0.0234	0.0234	0.0000	0.0224	0.0224	0.0000	59.1951	59.1951	0.0134	0.0000	59.5301

Shell CNG Truck Station - South Coast AQMD Air District, Annual

3.2 Trenching - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0104	2.2100e-003	3.0000e-005	6.9000e-004	3.0000e-005	7.2000e-004	1.9000e-004	3.0000e-005	2.2000e-004	0.0000	2.9868	2.9868	2.0000e-004	0.0000	2.9919
Vendor	2.2500e-003	0.0764	0.0190	2.0000e-004	4.9800e-003	1.5000e-004	5.1300e-003	1.4400e-003	1.5000e-004	1.5800e-003	0.0000	19.2876	19.2876	1.2200e-003	0.0000	19.3181
Worker	4.2800e-003	3.1600e-003	0.0358	1.1000e-004	0.0113	8.0000e-005	0.0114	2.9900e-003	8.0000e-005	3.0700e-003	0.0000	9.8146	9.8146	2.6000e-004	0.0000	9.8212
Total	6.8200e-003	0.0900	0.0570	3.4000e-004	0.0169	2.6000e-004	0.0172	4.6200e-003	2.6000e-004	4.8700e-003	0.0000	32.0890	32.0890	1.6800e-003	0.0000	32.1312

3.3 CNG Compound Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0482	0.3876	0.3787	6.6000e-004		0.0174	0.0174		0.0165	0.0165	0.0000	54.9834	54.9834	0.0149	0.0000	55.3561
Total	0.0482	0.3876	0.3787	6.6000e-004		0.0174	0.0174		0.0165	0.0165	0.0000	54.9834	54.9834	0.0149	0.0000	55.3561

Shell CNG Truck Station - South Coast AQMD Air District, Annual

3.3 CNG Compound Installation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3500e-003	0.0459	0.0114	1.2000e-004	2.9900e-003	9.0000e-005	3.0800e-003	8.6000e-004	9.0000e-005	9.5000e-004	0.0000	11.5725	11.5725	7.3000e-004	0.0000	11.5908
Worker	4.2800e-003	3.1600e-003	0.0358	1.1000e-004	0.0113	8.0000e-005	0.0114	2.9900e-003	8.0000e-005	3.0700e-003	0.0000	9.8146	9.8146	2.6000e-004	0.0000	9.8212
Total	5.6300e-003	0.0490	0.0472	2.3000e-004	0.0143	1.7000e-004	0.0144	3.8500e-003	1.7000e-004	4.0200e-003	0.0000	21.3872	21.3872	9.9000e-004	0.0000	21.4121

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0482	0.3876	0.3787	6.6000e-004		0.0174	0.0174		0.0165	0.0165	0.0000	54.9833	54.9833	0.0149	0.0000	55.3561
Total	0.0482	0.3876	0.3787	6.6000e-004		0.0174	0.0174		0.0165	0.0165	0.0000	54.9833	54.9833	0.0149	0.0000	55.3561

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3.3 CNG Compound Installation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3500e-003	0.0459	0.0114	1.2000e-004	2.9900e-003	9.0000e-005	3.0800e-003	8.6000e-004	9.0000e-005	9.5000e-004	0.0000	11.5725	11.5725	7.3000e-004	0.0000	11.5908
Worker	4.2800e-003	3.1600e-003	0.0358	1.1000e-004	0.0113	8.0000e-005	0.0114	2.9900e-003	8.0000e-005	3.0700e-003	0.0000	9.8146	9.8146	2.6000e-004	0.0000	9.8212
Total	5.6300e-003	0.0490	0.0472	2.3000e-004	0.0143	1.7000e-004	0.0144	3.8500e-003	1.7000e-004	4.0200e-003	0.0000	21.3872	21.3872	9.9000e-004	0.0000	21.4121

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0214	0.1914	0.2135	3.3000e-004		0.0105	0.0105		9.7400e-003	9.7400e-003	0.0000	26.7511	26.7511	7.5100e-003	0.0000	26.9390
Paving	1.7800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0232	0.1914	0.2135	3.3000e-004		0.0105	0.0105		9.7400e-003	9.7400e-003	0.0000	26.7511	26.7511	7.5100e-003	0.0000	26.9390

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3.4 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0104	2.2100e-003	3.0000e-005	6.9000e-004	3.0000e-005	7.2000e-004	1.9000e-004	3.0000e-005	2.2000e-004	0.0000	2.9868	2.9868	2.0000e-004	0.0000	2.9919
Vendor	1.3500e-003	0.0459	0.0114	1.2000e-004	2.9900e-003	9.0000e-005	3.0800e-003	8.6000e-004	9.0000e-005	9.5000e-004	0.0000	11.5725	11.5725	7.3000e-004	0.0000	11.5908
Worker	4.2800e-003	3.1600e-003	0.0358	1.1000e-004	0.0113	8.0000e-005	0.0114	2.9900e-003	8.0000e-005	3.0700e-003	0.0000	9.8146	9.8146	2.6000e-004	0.0000	9.8212
Total	5.9200e-003	0.0594	0.0494	2.6000e-004	0.0150	2.0000e-004	0.0152	4.0400e-003	2.0000e-004	4.2400e-003	0.0000	24.3740	24.3740	1.1900e-003	0.0000	24.4040

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0214	0.1914	0.2135	3.3000e-004		0.0105	0.0105		9.7400e-003	9.7400e-003	0.0000	26.7511	26.7511	7.5100e-003	0.0000	26.9389
Paving	1.7800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0232	0.1914	0.2135	3.3000e-004		0.0105	0.0105		9.7400e-003	9.7400e-003	0.0000	26.7511	26.7511	7.5100e-003	0.0000	26.9389

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3.4 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9000e-004	0.0104	2.2100e-003	3.0000e-005	6.9000e-004	3.0000e-005	7.2000e-004	1.9000e-004	3.0000e-005	2.2000e-004	0.0000	2.9868	2.9868	2.0000e-004	0.0000	2.9919
Vendor	1.3500e-003	0.0459	0.0114	1.2000e-004	2.9900e-003	9.0000e-005	3.0800e-003	8.6000e-004	9.0000e-005	9.5000e-004	0.0000	11.5725	11.5725	7.3000e-004	0.0000	11.5908
Worker	4.2800e-003	3.1600e-003	0.0358	1.1000e-004	0.0113	8.0000e-005	0.0114	2.9900e-003	8.0000e-005	3.0700e-003	0.0000	9.8146	9.8146	2.6000e-004	0.0000	9.8212
Total	5.9200e-003	0.0594	0.0494	2.6000e-004	0.0150	2.0000e-004	0.0152	4.0400e-003	2.0000e-004	4.2400e-003	0.0000	24.3740	24.3740	1.1900e-003	0.0000	24.4040

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	6.6100e-003	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394

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3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.0600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5000e-004	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394
Total	6.6100e-003	3.8200e-003	4.5400e-003	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6394

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3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Shell CNG Truck Station - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

Shell CNG Truck Station - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	1.10891e+006	353.3225	0.0146	3.0200e-003	354.5865
Total		353.3225	0.0146	3.0200e-003	354.5865

Shell CNG Truck Station - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	1.10891e+006	353.3225	0.0146	3.0200e-003	354.5865
Total		353.3225	0.0146	3.0200e-003	354.5865

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.4400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	4.4400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Shell CNG Truck Station - South Coast AQMD Air District, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	4.4400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.1000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.8300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	4.4400e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail

Shell CNG Truck Station - South Coast AQMD Air District, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Shell CNG Truck Station - South Coast AQMD Air District, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Shell CNG Truck Station - South Coast AQMD Air District, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Shell CNG Truck Station - South Coast AQMD Air District, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Shell CNG Truck Station - South Coast AQMD Air District, Summer

Shell CNG Truck Station
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.36	59,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Shell CNG Truck Station - South Coast AQMD Air District, Summer

Project Characteristics - Construction Start date: March 1st 2021

Land Use - A

Construction Phase - a

Off-road Equipment -

Off-road Equipment - a

Off-road Equipment - A

Off-road Equipment - a

Trips and VMT - A

Grading -

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment - a

Energy Use - Electricity use from canopy lighting, compressors, and dryer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	3,558.00	2,614.00
tblAreaCoating	Area_Parking	3558	2614
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	79.00
tblConstructionPhase	NumDays	4.00	79.00
tblConstructionPhase	NumDays	10.00	79.00
tblEnergyUse	NT24E	0.00	18.70
tblLandUse	LandUseSquareFeet	43,560.00	59,300.00
tblLandUse	LotAcreage	1.00	1.36
tblOffRoadEquipment	HorsePower	89.00	0.00
tblOffRoadEquipment	HorsePower	84.00	0.00
tblOffRoadEquipment	HorsePower	187.00	0.00

Shell CNG Truck Station - South Coast AQMD Air District, Summer

tbloffRoadEquipment	HorsePower	130.00	0.00
tbloffRoadEquipment	HorsePower	132.00	0.00
tbloffRoadEquipment	HorsePower	80.00	0.00
tbloffRoadEquipment	HorsePower	247.00	0.00
tbloffRoadEquipment	HorsePower	97.00	0.00
tbloffRoadEquipment	LoadFactor	0.20	0.00
tbloffRoadEquipment	LoadFactor	0.74	0.00
tbloffRoadEquipment	LoadFactor	0.41	0.00
tbloffRoadEquipment	LoadFactor	0.42	0.00
tbloffRoadEquipment	LoadFactor	0.38	0.00
tbloffRoadEquipment	LoadFactor	0.40	0.00
tbloffRoadEquipment	LoadFactor	0.37	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tbloffRoadEquipment	UsageHours	6.00	0.00
tbloffRoadEquipment	UsageHours	8.00	0.00
tbloffRoadEquipment	UsageHours	6.00	0.00
tbloffRoadEquipment	UsageHours	6.00	0.00

Shell CNG Truck Station - South Coast AQMD Air District, Summer

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	10.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

Shell CNG Truck Station - South Coast AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0243	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0243	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Shell CNG Truck Station - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Grading	5/13/2021	8/31/2021	5	79	
2	CNG Compound Installation	Building Construction	5/13/2021	8/31/2021	5	79	
3	Paving	Paving	5/13/2021	8/31/2021	5	79	
4	Architectural Coating	Architectural Coating	7/19/2021	7/23/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.36

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,614 (Architectural Coating – sqft)

OffRoad Equipment

Shell CNG Truck Station - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Cranes	1	8.00	231	0.29
Trenching	Graders	0	0.00	0	0.00
Trenching	Rubber Tired Dozers	0	0.00	0	0.00
Trenching	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
CNG Compound Installation	Cranes	1	6.00	231	0.29
CNG Compound Installation	Excavators	1	8.00	158	0.38
CNG Compound Installation	Forklifts	0	0.00	0	0.00
CNG Compound Installation	Generator Sets	0	0.00	0	0.00
CNG Compound Installation	Skid Steer Loaders	1	8.00	65	0.37
CNG Compound Installation	Tractors/Loaders/Backhoes	0	0.00	0	0.00
CNG Compound Installation	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	0	0.00	0	0.00
Paving	Paving Equipment	0	0.00	0	0.36
Paving	Plate Compactors	2	8.00	8	0.43
Paving	Rollers	0	0.00	0	0.00
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Shell CNG Truck Station - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	6	26.00	20.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
CNG Compound Installation	5	26.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	26.00	12.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7874	12.5438	10.8358	0.0187		0.5911	0.5911		0.5676	0.5676		1,651.9372	1,651.9372	0.3739		1,661.2854
Total	1.7874	12.5438	10.8358	0.0187	0.0000	0.5911	0.5911	0.0000	0.5676	0.5676		1,651.9372	1,651.9372	0.3739		1,661.2854

Shell CNG Truck Station - South Coast AQMD Air District, Summer

3.2 Trenching - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.3500e-003	0.2562	0.0542	7.8000e-004	0.0177	7.9000e-004	0.0185	4.8500e-003	7.6000e-004	5.6100e-003		84.0040	84.0040	5.6000e-003		84.1441
Vendor	0.0557	1.9075	0.4527	5.1000e-003	0.1280	3.8400e-003	0.1318	0.0369	3.6700e-003	0.0405		544.8769	544.8769	0.0330		545.7009
Worker	0.1098	0.0712	0.9795	2.8900e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		287.9249	287.9249	7.7400e-003		288.1184
Total	0.1728	2.2349	1.4864	8.7700e-003	0.4363	6.7700e-003	0.4431	0.1188	6.4000e-003	0.1252		916.8058	916.8058	0.0463		917.9635

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7874	12.5438	10.8358	0.0187		0.5911	0.5911		0.5676	0.5676	0.0000	1,651.9372	1,651.9372	0.3739		1,661.2854
Total	1.7874	12.5438	10.8358	0.0187	0.0000	0.5911	0.5911	0.0000	0.5676	0.5676	0.0000	1,651.9372	1,651.9372	0.3739		1,661.2854

Shell CNG Truck Station - South Coast AQMD Air District, Summer

3.2 Trenching - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.3500e-003	0.2562	0.0542	7.8000e-004	0.0177	7.9000e-004	0.0185	4.8500e-003	7.6000e-004	5.6100e-003		84.0040	84.0040	5.6000e-003		84.1441
Vendor	0.0557	1.9075	0.4527	5.1000e-003	0.1280	3.8400e-003	0.1318	0.0369	3.6700e-003	0.0405		544.8769	544.8769	0.0330		545.7009
Worker	0.1098	0.0712	0.9795	2.8900e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		287.9249	287.9249	7.7400e-003		288.1184
Total	0.1728	2.2349	1.4864	8.7700e-003	0.4363	6.7700e-003	0.4431	0.1188	6.4000e-003	0.1252		916.8058	916.8058	0.0463		917.9635

3.3 CNG Compound Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177		1,534.3999	1,534.3999	0.4161		1,544.8020
Total	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177		1,534.3999	1,534.3999	0.4161		1,544.8020

Shell CNG Truck Station - South Coast AQMD Air District, Summer

3.3 CNG Compound Installation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0334	1.1445	0.2716	3.0600e-003	0.0768	2.3000e-003	0.0791	0.0221	2.2000e-003	0.0243		326.9262	326.9262	0.0198		327.4206
Worker	0.1098	0.0712	0.9795	2.8900e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		287.9249	287.9249	7.7400e-003		288.1184
Total	0.1431	1.2157	1.2511	5.9500e-003	0.3674	4.4400e-003	0.3719	0.0992	4.1700e-003	0.1034		614.8510	614.8510	0.0275		615.5390

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177	0.0000	1,534.3999	1,534.3999	0.4161		1,544.8020
Total	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177	0.0000	1,534.3999	1,534.3999	0.4161		1,544.8020

Shell CNG Truck Station - South Coast AQMD Air District, Summer

3.3 CNG Compound Installation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0334	1.1445	0.2716	3.0600e-003	0.0768	2.3000e-003	0.0791	0.0221	2.2000e-003	0.0243		326.9262	326.9262	0.0198		327.4206
Worker	0.1098	0.0712	0.9795	2.8900e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		287.9249	287.9249	7.7400e-003		288.1184
Total	0.1431	1.2157	1.2511	5.9500e-003	0.3674	4.4400e-003	0.3719	0.0992	4.1700e-003	0.1034		614.8510	614.8510	0.0275		615.5390

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5429	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467		746.5334	746.5334	0.2097		751.7749
Paving	0.0451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5880	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467		746.5334	746.5334	0.2097		751.7749

Shell CNG Truck Station - South Coast AQMD Air District, Summer

3.4 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.3500e-003	0.2562	0.0542	7.8000e-004	0.0177	7.9000e-004	0.0185	4.8500e-003	7.6000e-004	5.6100e-003		84.0040	84.0040	5.6000e-003		84.1441
Vendor	0.0334	1.1445	0.2716	3.0600e-003	0.0768	2.3000e-003	0.0791	0.0221	2.2000e-003	0.0243		326.9262	326.9262	0.0198		327.4206
Worker	0.1098	0.0712	0.9795	2.8900e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		287.9249	287.9249	7.7400e-003		288.1184
Total	0.1505	1.4719	1.3053	6.7300e-003	0.3851	5.2300e-003	0.3904	0.1040	4.9300e-003	0.1090		698.8550	698.8550	0.0331		699.6831

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5429	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467	0.0000	746.5334	746.5334	0.2097		751.7749
Paving	0.0451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5880	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467	0.0000	746.5334	746.5334	0.2097		751.7749

Shell CNG Truck Station - South Coast AQMD Air District, Summer

3.4 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.3500e-003	0.2562	0.0542	7.8000e-004	0.0177	7.9000e-004	0.0185	4.8500e-003	7.6000e-004	5.6100e-003		84.0040	84.0040	5.6000e-003		84.1441
Vendor	0.0334	1.1445	0.2716	3.0600e-003	0.0768	2.3000e-003	0.0791	0.0221	2.2000e-003	0.0243		326.9262	326.9262	0.0198		327.4206
Worker	0.1098	0.0712	0.9795	2.8900e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		287.9249	287.9249	7.7400e-003		288.1184
Total	0.1505	1.4719	1.3053	6.7300e-003	0.3851	5.2300e-003	0.3904	0.1040	4.9300e-003	0.1090		698.8550	698.8550	0.0331		699.6831

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.4232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	2.6421	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Shell CNG Truck Station - South Coast AQMD Air District, Summer

3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.4232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	2.6421	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Shell CNG Truck Station - South Coast AQMD Air District, Summer

3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Shell CNG Truck Station - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

Shell CNG Truck Station - South Coast AQMD Air District, Summer

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Shell CNG Truck Station - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Shell CNG Truck Station - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

7.0 Water Detail

Shell CNG Truck Station - South Coast AQMD Air District, Summer

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Shell CNG Truck Station - South Coast AQMD Air District, Winter

Shell CNG Truck Station
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.36	59,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Shell CNG Truck Station - South Coast AQMD Air District, Winter

Project Characteristics - Construction Start date: March 1st 2021

Land Use - A

Construction Phase - a

Off-road Equipment -

Off-road Equipment - a

Off-road Equipment - A

Off-road Equipment - a

Trips and VMT - A

Grading -

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment - a

Energy Use - Electricity use from canopy lighting, compressors, and dryer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	3,558.00	2,614.00
tblAreaCoating	Area_Parking	3558	2614
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	79.00
tblConstructionPhase	NumDays	4.00	79.00
tblConstructionPhase	NumDays	10.00	79.00
tblEnergyUse	NT24E	0.00	18.70
tblLandUse	LandUseSquareFeet	43,560.00	59,300.00
tblLandUse	LotAcreage	1.00	1.36
tblOffRoadEquipment	HorsePower	89.00	0.00
tblOffRoadEquipment	HorsePower	84.00	0.00
tblOffRoadEquipment	HorsePower	187.00	0.00

Shell CNG Truck Station - South Coast AQMD Air District, Winter

tbloffRoadEquipment	HorsePower	130.00	0.00
tbloffRoadEquipment	HorsePower	132.00	0.00
tbloffRoadEquipment	HorsePower	80.00	0.00
tbloffRoadEquipment	HorsePower	247.00	0.00
tbloffRoadEquipment	HorsePower	97.00	0.00
tbloffRoadEquipment	LoadFactor	0.20	0.00
tbloffRoadEquipment	LoadFactor	0.74	0.00
tbloffRoadEquipment	LoadFactor	0.41	0.00
tbloffRoadEquipment	LoadFactor	0.42	0.00
tbloffRoadEquipment	LoadFactor	0.38	0.00
tbloffRoadEquipment	LoadFactor	0.40	0.00
tbloffRoadEquipment	LoadFactor	0.37	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tbloffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tbloffRoadEquipment	UsageHours	6.00	0.00
tbloffRoadEquipment	UsageHours	8.00	0.00
tbloffRoadEquipment	UsageHours	6.00	0.00
tbloffRoadEquipment	UsageHours	6.00	0.00

Shell CNG Truck Station - South Coast AQMD Air District, Winter

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	10.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

Shell CNG Truck Station - South Coast AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0243	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0243	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Shell CNG Truck Station - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Grading	5/13/2021	8/31/2021	5	79	
2	CNG Compound Installation	Building Construction	5/13/2021	8/31/2021	5	79	
3	Paving	Paving	5/13/2021	8/31/2021	5	79	
4	Architectural Coating	Architectural Coating	7/19/2021	7/23/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.36

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,614 (Architectural Coating – sqft)

OffRoad Equipment

Shell CNG Truck Station - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Cranes	1	8.00	231	0.29
Trenching	Graders	0	0.00	0	0.00
Trenching	Rubber Tired Dozers	0	0.00	0	0.00
Trenching	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
CNG Compound Installation	Cranes	1	6.00	231	0.29
CNG Compound Installation	Excavators	1	8.00	158	0.38
CNG Compound Installation	Forklifts	0	0.00	0	0.00
CNG Compound Installation	Generator Sets	0	0.00	0	0.00
CNG Compound Installation	Skid Steer Loaders	1	8.00	65	0.37
CNG Compound Installation	Tractors/Loaders/Backhoes	0	0.00	0	0.00
CNG Compound Installation	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	0	0.00	0	0.00
Paving	Paving Equipment	0	0.00	0	0.36
Paving	Plate Compactors	2	8.00	8	0.43
Paving	Rollers	0	0.00	0	0.00
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Shell CNG Truck Station - South Coast AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	6	26.00	20.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
CNG Compound Installation	5	26.00	12.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	26.00	12.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7874	12.5438	10.8358	0.0187		0.5911	0.5911		0.5676	0.5676		1,651.937 2	1,651.937 2	0.3739		1,661.285 4
Total	1.7874	12.5438	10.8358	0.0187	0.0000	0.5911	0.5911	0.0000	0.5676	0.5676		1,651.937 2	1,651.937 2	0.3739		1,661.285 4

Shell CNG Truck Station - South Coast AQMD Air District, Winter

3.2 Trenching - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5600e-003	0.2592	0.0582	7.6000e-004	0.0177	8.1000e-004	0.0185	4.8500e-003	7.7000e-004	5.6200e-003		82.4502	82.4502	5.8400e-003		82.5962
Vendor	0.0586	1.9015	0.5065	4.9600e-003	0.1280	3.9600e-003	0.1320	0.0369	3.7900e-003	0.0406		529.1004	529.1004	0.0354		529.9854
Worker	0.1199	0.0779	0.8802	2.7000e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		269.2737	269.2737	7.2200e-003		269.4541
Total	0.1861	2.2386	1.4450	8.4200e-003	0.4363	6.9100e-003	0.4432	0.1188	6.5300e-003	0.1253		880.8242	880.8242	0.0485		882.0357

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7874	12.5438	10.8358	0.0187		0.5911	0.5911		0.5676	0.5676	0.0000	1,651.9372	1,651.9372	0.3739		1,661.2854
Total	1.7874	12.5438	10.8358	0.0187	0.0000	0.5911	0.5911	0.0000	0.5676	0.5676	0.0000	1,651.9372	1,651.9372	0.3739		1,661.2854

Shell CNG Truck Station - South Coast AQMD Air District, Winter

3.2 Trenching - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5600e-003	0.2592	0.0582	7.6000e-004	0.0177	8.1000e-004	0.0185	4.8500e-003	7.7000e-004	5.6200e-003		82.4502	82.4502	5.8400e-003		82.5962
Vendor	0.0586	1.9015	0.5065	4.9600e-003	0.1280	3.9600e-003	0.1320	0.0369	3.7900e-003	0.0406		529.1004	529.1004	0.0354		529.9854
Worker	0.1199	0.0779	0.8802	2.7000e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		269.2737	269.2737	7.2200e-003		269.4541
Total	0.1861	2.2386	1.4450	8.4200e-003	0.4363	6.9100e-003	0.4432	0.1188	6.5300e-003	0.1253		880.8242	880.8242	0.0485		882.0357

3.3 CNG Compound Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177		1,534.3999	1,534.3999	0.4161		1,544.8020
Total	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177		1,534.3999	1,534.3999	0.4161		1,544.8020

Shell CNG Truck Station - South Coast AQMD Air District, Winter

3.3 CNG Compound Installation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0352	1.1409	0.3039	2.9700e-003	0.0768	2.3800e-003	0.0792	0.0221	2.2700e-003	0.0244		317.4602	317.4602	0.0212		317.9912
Worker	0.1199	0.0779	0.8802	2.7000e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		269.2737	269.2737	7.2200e-003		269.4541
Total	0.1551	1.2188	1.1841	5.6700e-003	0.3674	4.5200e-003	0.3719	0.0992	4.2400e-003	0.1034		586.7339	586.7339	0.0285		587.4453

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177	0.0000	1,534.3999	1,534.3999	0.4161		1,544.8020
Total	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177	0.0000	1,534.3999	1,534.3999	0.4161		1,544.8020

Shell CNG Truck Station - South Coast AQMD Air District, Winter

3.3 CNG Compound Installation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0352	1.1409	0.3039	2.9700e-003	0.0768	2.3800e-003	0.0792	0.0221	2.2700e-003	0.0244		317.4602	317.4602	0.0212		317.9912
Worker	0.1199	0.0779	0.8802	2.7000e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		269.2737	269.2737	7.2200e-003		269.4541
Total	0.1551	1.2188	1.1841	5.6700e-003	0.3674	4.5200e-003	0.3719	0.0992	4.2400e-003	0.1034		586.7339	586.7339	0.0285		587.4453

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5429	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467		746.5334	746.5334	0.2097		751.7749
Paving	0.0451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5880	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467		746.5334	746.5334	0.2097		751.7749

Shell CNG Truck Station - South Coast AQMD Air District, Winter

3.4 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5600e-003	0.2592	0.0582	7.6000e-004	0.0177	8.1000e-004	0.0185	4.8500e-003	7.7000e-004	5.6200e-003		82.4502	82.4502	5.8400e-003		82.5962
Vendor	0.0352	1.1409	0.3039	2.9700e-003	0.0768	2.3800e-003	0.0792	0.0221	2.2700e-003	0.0244		317.4602	317.4602	0.0212		317.9912
Worker	0.1199	0.0779	0.8802	2.7000e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		269.2737	269.2737	7.2200e-003		269.4541
Total	0.1626	1.4780	1.2424	6.4300e-003	0.3851	5.3300e-003	0.3904	0.1040	5.0100e-003	0.1091		669.1840	669.1840	0.0343		670.0415

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5429	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467	0.0000	746.5334	746.5334	0.2097		751.7749
Paving	0.0451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5880	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467	0.0000	746.5334	746.5334	0.2097		751.7749

Shell CNG Truck Station - South Coast AQMD Air District, Winter

3.4 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5600e-003	0.2592	0.0582	7.6000e-004	0.0177	8.1000e-004	0.0185	4.8500e-003	7.7000e-004	5.6200e-003		82.4502	82.4502	5.8400e-003		82.5962
Vendor	0.0352	1.1409	0.3039	2.9700e-003	0.0768	2.3800e-003	0.0792	0.0221	2.2700e-003	0.0244		317.4602	317.4602	0.0212		317.9912
Worker	0.1199	0.0779	0.8802	2.7000e-003	0.2906	2.1400e-003	0.2928	0.0771	1.9700e-003	0.0790		269.2737	269.2737	7.2200e-003		269.4541
Total	0.1626	1.4780	1.2424	6.4300e-003	0.3851	5.3300e-003	0.3904	0.1040	5.0100e-003	0.1091		669.1840	669.1840	0.0343		670.0415

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.4232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	2.6421	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Shell CNG Truck Station - South Coast AQMD Air District, Winter

3.5 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.4232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	2.6421	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Shell CNG Truck Station - South Coast AQMD Air District, Winter

3.5 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Shell CNG Truck Station - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

Shell CNG Truck Station - South Coast AQMD Air District, Winter

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Shell CNG Truck Station - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Shell CNG Truck Station - South Coast AQMD Air District, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

7.0 Water Detail

Shell CNG Truck Station - South Coast AQMD Air District, Winter

7.1 Mitigation Measures Water**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Shell CNG Truck Station - South Coast AQMD Air District, Summer

Shell CNG Truck Station
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.36	59,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction Start date: March 1st 2021

Land Use - A

Construction Phase - a

Off-road Equipment - a

Off-road Equipment - A

Off-road Equipment - a

Trips and VMT - A

Grading -

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment - a

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	3,558.00	2,614.00
tblAreaCoating	Area_Parking	3558	2614
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	79.00
tblConstructionPhase	NumDays	4.00	79.00
tblConstructionPhase	NumDays	10.00	79.00
tblLandUse	LandUseSquareFeet	43,560.00	59,300.00
tblLandUse	LotAcreage	1.00	1.36
tblOffRoadEquipment	HorsePower	89.00	0.00
tblOffRoadEquipment	HorsePower	84.00	0.00
tblOffRoadEquipment	HorsePower	187.00	0.00
tblOffRoadEquipment	HorsePower	130.00	0.00
tblOffRoadEquipment	HorsePower	132.00	0.00
tblOffRoadEquipment	HorsePower	80.00	0.00
tblOffRoadEquipment	HorsePower	247.00	0.00
tblOffRoadEquipment	HorsePower	97.00	0.00
tblOffRoadEquipment	LoadFactor	0.20	0.00
tblOffRoadEquipment	LoadFactor	0.74	0.00
tblOffRoadEquipment	LoadFactor	0.41	0.00
tblOffRoadEquipment	LoadFactor	0.42	0.00
tblOffRoadEquipment	LoadFactor	0.38	0.00
tblOffRoadEquipment	LoadFactor	0.40	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	78.00	250.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	10.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	6.3809	31.5637	28.4862	0.0496	1.9900e-003	1.3924	1.3943	7.7000e-004	1.3274	1.3282	0.0000	4,534.0611	4,534.0611	1.0664	0.0000	4,560.7203
Maximum	6.3809	31.5637	28.4862	0.0496	1.9900e-003	1.3924	1.3943	7.7000e-004	1.3274	1.3282	0.0000	4,534.0611	4,534.0611	1.0664	0.0000	4,560.7203

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	6.3809	31.5637	28.4862	0.0496	1.9900e-003	1.3924	1.3943	7.7000e-004	1.3274	1.3282	0.0000	4,534.0611	4,534.0611	1.0664	0.0000	4,560.7203
Maximum	6.3809	31.5637	28.4862	0.0496	1.9900e-003	1.3924	1.3943	7.7000e-004	1.3274	1.3282	0.0000	4,534.0611	4,534.0611	1.0664	0.0000	4,560.7203

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	1.0794	6.8446	4.6646	0.0254		0.2201	0.2201		0.2201	0.2201		2,405.5431	2,405.5431	0.0974		2,407.9770
Total	1.1037	6.8446	4.6647	0.0254	0.0000	0.2201	0.2201	0.0000	0.2201	0.2201		2,405.5433	2,405.5433	0.0974	0.0000	2,407.9772

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	1.0794	6.8446	4.6646	0.0254		0.2201	0.2201		0.2201	0.2201		2,405.5431	2,405.5431	0.0974		2,407.9770
Total	1.1037	6.8446	4.6647	0.0254	0.0000	0.2201	0.2201	0.0000	0.2201	0.2201		2,405.5433	2,405.5433	0.0974	0.0000	2,407.9772

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Grading	5/13/2021	8/31/2021	5	79	
2	CNG Compound Installation	Building Construction	5/13/2021	8/31/2021	5	79	
3	Paving	Paving	5/13/2021	8/31/2021	5	79	
4	Architectural Coating	Architectural Coating	7/19/2021	7/23/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.36

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,614

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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Trenching	Cranes	1	8.00	231	0.29
Trenching	Graders	0	0.00	0	0.00
Trenching	Rubber Tired Dozers	0	0.00	0	0.00
Trenching	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
CNG Compound Installation	Cranes	1	6.00	231	0.29
CNG Compound Installation	Excavators	1	8.00	158	0.38
CNG Compound Installation	Forklifts	0	0.00	0	0.00
CNG Compound Installation	Generator Sets	0	0.00	0	0.00
CNG Compound Installation	Skid Steer Loaders	1	8.00	65	0.37
CNG Compound Installation	Tractors/Loaders/Backhoes	0	0.00	0	0.00
CNG Compound Installation	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	0	0.00	0	0.00
Paving	Paving Equipment	0	0.00	0	0.36
Paving	Plate Compactors	2	8.00	8	0.43
Paving	Rollers	0	0.00	0	0.00
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	6	26.00	20.00	80.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
CNG Compound Installation	5	26.00	12.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Paving	6	26.00	12.00	80.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7874	12.5438	10.8358	0.0187		0.5911	0.5911		0.5676	0.5676		1,651.9372	1,651.9372	0.3739		1,661.2854
Total	1.7874	12.5438	10.8358	0.0187	0.0000	0.5911	0.5911	0.0000	0.5676	0.5676		1,651.9372	1,651.9372	0.3739		1,661.2854

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6300e-003	0.0960	0.0107	1.1000e-004	2.0000e-005	4.0000e-005	6.0000e-005	1.0000e-005	3.0000e-005	4.0000e-005		12.0842	12.0842	1.8000e-003		12.1292
Vendor	0.0263	1.1924	0.2477	1.1800e-003	5.3000e-004	3.9000e-004	9.1000e-004	2.1000e-004	3.7000e-004	5.8000e-004		126.4478	126.4478	0.0192		126.9287
Worker	0.0276	6.5400e-003	0.0920	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.7963	5.7963	4.9000e-004		5.8085
Total	0.0555	1.2949	0.3504	1.3500e-003	8.1000e-004	5.9000e-004	1.3900e-003	3.2000e-004	5.5000e-004	8.7000e-004		144.3283	144.3283	0.0215		144.8664

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7874	12.5438	10.8358	0.0187		0.5911	0.5911		0.5676	0.5676	0.0000	1,651.9372	1,651.9372	0.3739		1,661.2854
Total	1.7874	12.5438	10.8358	0.0187	0.0000	0.5911	0.5911	0.0000	0.5676	0.5676	0.0000	1,651.9372	1,651.9372	0.3739		1,661.2854

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6300e-003	0.0960	0.0107	1.1000e-004	2.0000e-005	4.0000e-005	6.0000e-005	1.0000e-005	3.0000e-005	4.0000e-005		12.0842	12.0842	1.8000e-003		12.1292
Vendor	0.0263	1.1924	0.2477	1.1800e-003	5.3000e-004	3.9000e-004	9.1000e-004	2.1000e-004	3.7000e-004	5.8000e-004		126.4478	126.4478	0.0192		126.9287
Worker	0.0276	6.5400e-003	0.0920	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.7963	5.7963	4.9000e-004		5.8085
Total	0.0555	1.2949	0.3504	1.3500e-003	8.1000e-004	5.9000e-004	1.3900e-003	3.2000e-004	5.5000e-004	8.7000e-004		144.3283	144.3283	0.0215		144.8664

3.3 CNG Compound Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177		1,534.3999	1,534.3999	0.4161		1,544.8020

Total	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177		1,534.3999	1,534.3999	0.4161		1,544.8020
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0158	0.7154	0.1486	7.1000e-004	3.2000e-004	2.3000e-004	5.5000e-004	1.2000e-004	2.2000e-004	3.5000e-004		75.8687	75.8687	0.0115		76.1573
Worker	0.0276	6.5400e-003	0.0920	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.7963	5.7963	4.9000e-004		5.8085
Total	0.0433	0.7220	0.2406	7.7000e-004	5.8000e-004	3.9000e-004	9.7000e-004	2.2000e-004	3.7000e-004	6.0000e-004		81.6650	81.6650	0.0120		81.9658

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177	0.0000	1,534.3999	1,534.3999	0.4161		1,544.8020
Total	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177	0.0000	1,534.3999	1,534.3999	0.4161		1,544.8020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0158	0.7154	0.1486	7.1000e-004	3.2000e-004	2.3000e-004	5.5000e-004	1.2000e-004	2.2000e-004	3.5000e-004		75.8687	75.8687	0.0115		76.1573
Worker	0.0276	6.5400e-003	0.0920	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.7963	5.7963	4.9000e-004		5.8085
Total	0.0433	0.7220	0.2406	7.7000e-004	5.8000e-004	3.9000e-004	9.7000e-004	2.2000e-004	3.7000e-004	6.0000e-004		81.6650	81.6650	0.0120		81.9658

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5429	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467		746.5334	746.5334	0.2097		751.7749
Paving	0.0451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5880	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467		746.5334	746.5334	0.2097		751.7749

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	1.6300e-003	0.0960	0.0107	1.1000e-004	2.0000e-005	4.0000e-005	6.0000e-005	1.0000e-005	3.0000e-005	4.0000e-005		12.0842	12.0842	1.8000e-003		12.1292
Vendor	0.0158	0.7154	0.1486	7.1000e-004	3.2000e-004	2.3000e-004	5.5000e-004	1.2000e-004	2.2000e-004	3.5000e-004		75.8687	75.8687	0.0115		76.1573
Worker	0.0276	6.5400e-003	0.0920	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.7963	5.7963	4.9000e-004		5.8085
Total	0.0450	0.8180	0.2513	8.8000e-004	6.0000e-004	4.3000e-004	1.0300e-003	2.3000e-004	4.0000e-004	6.4000e-004		93.7492	93.7492	0.0138		94.0950

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5429	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467	0.0000	746.5334	746.5334	0.2097		751.7749
Paving	0.0451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5880	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467	0.0000	746.5334	746.5334	0.2097		751.7749

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.6300e-003	0.0960	0.0107	1.1000e-004	2.0000e-005	4.0000e-005	6.0000e-005	1.0000e-005	3.0000e-005	4.0000e-005		12.0842	12.0842	1.8000e-003		12.1292
Vendor	0.0158	0.7154	0.1486	7.1000e-004	3.2000e-004	2.3000e-004	5.5000e-004	1.2000e-004	2.2000e-004	3.5000e-004		75.8687	75.8687	0.0115		76.1573
Worker	0.0276	6.5400e-003	0.0920	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.7963	5.7963	4.9000e-004		5.8085
Total	0.0450	0.8180	0.2513	8.8000e-004	6.0000e-004	4.3000e-004	1.0300e-003	2.3000e-004	4.0000e-004	6.4000e-004		93.7492	93.7492	0.0138		94.0950

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.4232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	2.6421	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.4232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	2.6421	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
	NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Air Compressors	2	8.00	365	250	0.48	CNG

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					

Air Compressors	1.0794	6.8446	4.6646	0.0254		0.2201	0.2201		0.2201	0.2201		2,405.5431	2,405.5431	0.0974		2,407.9770
Total	1.0794	6.8446	4.6646	0.0254		0.2201	0.2201		0.2201	0.2201		2,405.5431	2,405.5431	0.0974		2,407.9770

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Shell CNG Truck Station - South Coast AQMD Air District, Winter

Shell CNG Truck Station
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	Acre	1.36	59,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction Start date: March 1st 2021

Land Use - A

Construction Phase - a

Off-road Equipment - a

Off-road Equipment - A

Off-road Equipment - a

Trips and VMT - A

Grading -

Construction Off-road Equipment Mitigation -

Operational Off-Road Equipment - a

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	3,558.00	2,614.00
tblAreaCoating	Area_Parking	3558	2614
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	79.00
tblConstructionPhase	NumDays	4.00	79.00
tblConstructionPhase	NumDays	10.00	79.00
tblLandUse	LandUseSquareFeet	43,560.00	59,300.00
tblLandUse	LotAcreage	1.00	1.36
tblOffRoadEquipment	HorsePower	89.00	0.00
tblOffRoadEquipment	HorsePower	84.00	0.00
tblOffRoadEquipment	HorsePower	187.00	0.00
tblOffRoadEquipment	HorsePower	130.00	0.00
tblOffRoadEquipment	HorsePower	132.00	0.00
tblOffRoadEquipment	HorsePower	80.00	0.00
tblOffRoadEquipment	HorsePower	247.00	0.00
tblOffRoadEquipment	HorsePower	97.00	0.00
tblOffRoadEquipment	LoadFactor	0.20	0.00
tblOffRoadEquipment	LoadFactor	0.74	0.00
tblOffRoadEquipment	LoadFactor	0.41	0.00
tblOffRoadEquipment	LoadFactor	0.42	0.00
tblOffRoadEquipment	LoadFactor	0.38	0.00
tblOffRoadEquipment	LoadFactor	0.40	0.00
tblOffRoadEquipment	LoadFactor	0.37	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	78.00	250.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	HaulingTripNumber	0.00	80.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00
tblTripsAndVMT	VendorTripLength	6.90	0.00

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	10.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripLength	14.70	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	25.00	26.00
tblTripsAndVMT	WorkerTripNumber	15.00	26.00
tblTripsAndVMT	WorkerTripNumber	5.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	6.3774	31.4780	28.6668	0.0493	1.9900e-003	1.3927	1.3946	7.7000e-004	1.3277	1.3284	0.0000	4,495.8669	4,495.8669	1.0725	0.0000	4,522.6783
Maximum	6.3774	31.4780	28.6668	0.0493	1.9900e-003	1.3927	1.3946	7.7000e-004	1.3277	1.3284	0.0000	4,495.8669	4,495.8669	1.0725	0.0000	4,522.6783

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	6.3774	31.4780	28.6668	0.0493	1.9900e-003	1.3927	1.3946	7.7000e-004	1.3277	1.3284	0.0000	4,495.8669	4,495.8669	1.0725	0.0000	4,522.6783
Maximum	6.3774	31.4780	28.6668	0.0493	1.9900e-003	1.3927	1.3946	7.7000e-004	1.3277	1.3284	0.0000	4,495.8669	4,495.8669	1.0725	0.0000	4,522.6783

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	1.0794	6.8446	4.6646	0.0254		0.2201	0.2201		0.2201	0.2201		2,405.5431	2,405.5431	0.0974		2,407.9770
Total	1.1037	6.8446	4.6647	0.0254	0.0000	0.2201	0.2201	0.0000	0.2201	0.2201		2,405.5433	2,405.5433	0.0974	0.0000	2,407.9772

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Offroad	1.0794	6.8446	4.6646	0.0254		0.2201	0.2201		0.2201	0.2201		2,405.5431	2,405.5431	0.0974		2,407.9770
Total	1.1037	6.8446	4.6647	0.0254	0.0000	0.2201	0.2201	0.0000	0.2201	0.2201		2,405.5433	2,405.5433	0.0974	0.0000	2,407.9772

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Grading	5/13/2021	8/31/2021	5	79	
2	CNG Compound Installation	Building Construction	5/13/2021	8/31/2021	5	79	
3	Paving	Paving	5/13/2021	8/31/2021	5	79	
4	Architectural Coating	Architectural Coating	7/19/2021	7/23/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.36

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 2,614

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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Trenching	Cranes	1	8.00	231	0.29
Trenching	Graders	0	0.00	0	0.00
Trenching	Rubber Tired Dozers	0	0.00	0	0.00
Trenching	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Trenching	Welders	4	8.00	46	0.45
CNG Compound Installation	Cranes	1	6.00	231	0.29
CNG Compound Installation	Excavators	1	8.00	158	0.38
CNG Compound Installation	Forklifts	0	0.00	0	0.00
CNG Compound Installation	Generator Sets	0	0.00	0	0.00
CNG Compound Installation	Skid Steer Loaders	1	8.00	65	0.37
CNG Compound Installation	Tractors/Loaders/Backhoes	0	0.00	0	0.00
CNG Compound Installation	Welders	2	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	0	0.00	0	0.00
Paving	Paving Equipment	0	0.00	0	0.36
Paving	Plate Compactors	2	8.00	8	0.43
Paving	Rollers	0	0.00	0	0.00
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	6	26.00	20.00	80.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
CNG Compound Installation	5	26.00	12.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Paving	6	26.00	12.00	80.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	0.00	0.00	0.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000				0.0000
Off-Road	1.7874	12.5438	10.8358	0.0187		0.5911	0.5911		0.5676	0.5676		1,651.9372	1,651.9372	0.3739			1,661.2854
Total	1.7874	12.5438	10.8358	0.0187	0.0000	0.5911	0.5911	0.0000	0.5676	0.5676		1,651.9372	1,651.9372	0.3739			1,661.2854

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	1.8400e-003	0.0923	0.0150	1.0000e-004	2.0000e-005	5.0000e-005	7.0000e-005	1.0000e-005	5.0000e-005	5.0000e-005		10.5304	10.5304	2.0400e-003			10.5813
Vendor	0.0289	1.1560	0.3034	1.0300e-003	5.3000e-004	5.1000e-004	1.0300e-003	2.1000e-004	4.9000e-004	6.9000e-004		110.6713	110.6713	0.0217			111.2137
Worker	0.0244	7.1100e-003	0.1085	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.6703	5.6703	5.6000e-004			5.6842
Total	0.0551	1.2554	0.4269	1.1900e-003	8.1000e-004	7.2000e-004	1.5200e-003	3.2000e-004	6.9000e-004	9.9000e-004		126.8719	126.8719	0.0243			127.4791

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.7874	12.5438	10.8358	0.0187		0.5911	0.5911		0.5676	0.5676	0.0000	1,651.9372	1,651.9372	0.3739		1,661.2854
Total	1.7874	12.5438	10.8358	0.0187	0.0000	0.5911	0.5911	0.0000	0.5676	0.5676	0.0000	1,651.9372	1,651.9372	0.3739		1,661.2854

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8400e-003	0.0923	0.0150	1.0000e-004	2.0000e-005	5.0000e-005	7.0000e-005	1.0000e-005	5.0000e-005	5.0000e-005		10.5304	10.5304	2.0400e-003		10.5813
Vendor	0.0289	1.1560	0.3034	1.0300e-003	5.3000e-004	5.1000e-004	1.0300e-003	2.1000e-004	4.9000e-004	6.9000e-004		110.6713	110.6713	0.0217		111.2137
Worker	0.0244	7.1100e-003	0.1085	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.6703	5.6703	5.6000e-004		5.6842
Total	0.0551	1.2554	0.4269	1.1900e-003	8.1000e-004	7.2000e-004	1.5200e-003	3.2000e-004	6.9000e-004	9.9000e-004		126.8719	126.8719	0.0243		127.4791

3.3 CNG Compound Installation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177		1,534.3999	1,534.3999	0.4161		1,544.8020

Total	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177		1,534.3999	1,534.3999	0.4161		1,544.8020
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0173	0.6936	0.1821	6.2000e-004	3.2000e-004	3.1000e-004	6.2000e-004	1.2000e-004	2.9000e-004	4.2000e-004		66.4028	66.4028	0.0130		66.7282
Worker	0.0244	7.1100e-003	0.1085	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.6703	5.6703	5.6000e-004		5.6842
Total	0.0417	0.7007	0.2905	6.8000e-004	5.8000e-004	4.7000e-004	1.0400e-003	2.2000e-004	4.4000e-004	6.7000e-004		72.0730	72.0730	0.0136		72.4124

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177	0.0000	1,534.3999	1,534.3999	0.4161		1,544.8020
Total	1.2197	9.8117	9.5865	0.0167		0.4412	0.4412		0.4177	0.4177	0.0000	1,534.3999	1,534.3999	0.4161		1,544.8020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0173	0.6936	0.1821	6.2000e-004	3.2000e-004	3.1000e-004	6.2000e-004	1.2000e-004	2.9000e-004	4.2000e-004		66.4028	66.4028	0.0130		66.7282
Worker	0.0244	7.1100e-003	0.1085	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.6703	5.6703	5.6000e-004		5.6842
Total	0.0417	0.7007	0.2905	6.8000e-004	5.8000e-004	4.7000e-004	1.0400e-003	2.2000e-004	4.4000e-004	6.7000e-004		72.0730	72.0730	0.0136		72.4124

3.4 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5429	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467		746.5334	746.5334	0.2097		751.7749
Paving	0.0451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5880	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467		746.5334	746.5334	0.2097		751.7749

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	1.8400e-003	0.0923	0.0150	1.0000e-004	2.0000e-005	5.0000e-005	7.0000e-005	1.0000e-005	5.0000e-005	5.0000e-005		10.5304	10.5304	2.0400e-003		10.5813
Vendor	0.0173	0.6936	0.1821	6.2000e-004	3.2000e-004	3.1000e-004	6.2000e-004	1.2000e-004	2.9000e-004	4.2000e-004		66.4028	66.4028	0.0130		66.7282
Worker	0.0244	7.1100e-003	0.1085	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.6703	5.6703	5.6000e-004		5.6842
Total	0.0435	0.7930	0.3055	7.8000e-004	6.0000e-004	5.2000e-004	1.1100e-003	2.3000e-004	4.9000e-004	7.2000e-004		82.6034	82.6034	0.0156		82.9936

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5429	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467	0.0000	746.5334	746.5334	0.2097		751.7749
Paving	0.0451					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5880	4.8465	5.4040	8.2500e-003		0.2646	0.2646		0.2467	0.2467	0.0000	746.5334	746.5334	0.2097		751.7749

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.8400e-003	0.0923	0.0150	1.0000e-004	2.0000e-005	5.0000e-005	7.0000e-005	1.0000e-005	5.0000e-005	5.0000e-005		10.5304	10.5304	2.0400e-003		10.5813
Vendor	0.0173	0.6936	0.1821	6.2000e-004	3.2000e-004	3.1000e-004	6.2000e-004	1.2000e-004	2.9000e-004	4.2000e-004		66.4028	66.4028	0.0130		66.7282
Worker	0.0244	7.1100e-003	0.1085	6.0000e-005	2.6000e-004	1.6000e-004	4.2000e-004	1.0000e-004	1.5000e-004	2.5000e-004		5.6703	5.6703	5.6000e-004		5.6842
Total	0.0435	0.7930	0.3055	7.8000e-004	6.0000e-004	5.2000e-004	1.1100e-003	2.3000e-004	4.9000e-004	7.2000e-004		82.6034	82.6034	0.0156		82.9936

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.4232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	2.6421	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	2.4232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	2.6421	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
	NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.3200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0210					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.0243	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Air Compressors	2	8.00	365	250	0.48	CNG

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					

Air Compressors	1.0794	6.8446	4.6646	0.0254		0.2201	0.2201		0.2201	0.2201		2,405.5431	2,405.5431	0.0974		2,407.9770
Total	1.0794	6.8446	4.6646	0.0254		0.2201	0.2201		0.2201	0.2201		2,405.5431	2,405.5431	0.0974		2,407.9770

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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