City of Banning

Community Development Department

NOTICE OF AVAILABILITY/NOTICE OF INTENT
MITIGATED NEGATIVE DECLARATION
Project Title: Banning Well C-8

NOTICE IS HEREBY GIVEN that the City of Banning (City), as Lead Agency under the California Environmental Quality Act (CEQA), has prepared a Notice of Availability (NOA) and Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) for the proposed Banning Well C-8 ("Project"). The MND has been prepared pursuant to CEQA and the CEQA Guidelines. Copies of available materials may be reviewed or obtained from the City's office at the address cited below. The documents will also be available electronically through the State Clearinghouse.

Project Location: The Project will be located on approximately a 0.51-acre parcel located at the northern terminus of Thompson Avenue in the City of Banning, California, in Riverside County, north of the Interstate 10 freeway. The parcel is located in the southeastern portion of the Atwell development (Phase 2A of the Butterfield Specific Plan, Tentative Tract No. 37389).

Project Description: The City of Banning ("City") proposes a new drinking water well (C-8) and construction and operation of the wellhead and supporting facilities for the treatment and distribution of water from the new well. It is anticipated that the new well would have a pumping rate between 1,000 to 2,000 gallons per minute (gpm) of raw groundwater. On-site treatment of the water supply would consist of chlorination. The treated water would flow to the existing water distribution system via a connection to a transmission stub to be constructed as part of the improvements of the Atwell development. In the future, it may be determined that treatment of raw water beyond chlorination is necessary to achieve compliance with the State of California's regulations regarding the permissible level of hexavalent chromium (Cr6) in drinking water. To accommodate the potential need for future treatment to meet the Cr6 drinking water regulations, a 30- by 40-feet area at the project site has been identified as a potential location for installing associated treatment equipment.

Environmental Issues: Environmental issues addressed in the MND include: aesthetics; agricultural and forestry resources; air quality; biological resources; cultural resources; energy; geology and soils, greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation; tribal cultural resources; utilities and service systems; and wildfire.

Environmental Effects: The Initial Study Checklist determined that the proposed Project would result in potentially significant effects, but the Project Applicant will incorporate mitigation measures that would avoid or mitigate effects to a point where clearly no significant environmental impacts on the environment will occur. Mitigation has been included to address Biological Resources, Cultural Resources, Geology/Soils (Paleontological) Resources, and Noise.

Public Review Period: The MND has been prepared and distributed to responsible agencies for review and comment. The MND will be available for a 30-day public review period from **March 11, 2022 to April 9, 2022**.

Written comments on this MND should be addressed to:
Adam Rush, M.A., AICP
Community Development Director
99 E. Ramsey Street Banning, CA 92220
(951) 922-3131
arush@banningca.gov

A copy of the Public Review of the Mitigated Negative Declaration is available at the above address as well as at the City Community Development Department's website at https://www.banningca.gov/Archive.aspx?ADID=2609

All comments must be received in writing at the address below no later than 5 p.m. on Monday, April 11, 2022. Comments received and issues and concerns raised will be evaluated to determine if the mitigation has adequately addressed the concerns. All comments received will be included as part of the record.

BY ORDER OF THE COMMUNITY DEVELOPMENT DIRECTOR OF THE CITY OF BANNING, CALIFORNIA.

Adam B. Rush, M.A., AICP
Community Development Director

Dated: March 8, 2022
Published: March 11, 2022

Hazen

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JAN-2021

City of BANNING

Project Vicinity Map

Initial Study and Mitigated Negative Declaration (IS/MND)

Banning Well C-8 Project
Administrative Draft
December 2021

Prepared for:
City of Banning
99 East Ramsey Street
Banning, CA 92220

Prepared By:

Hazen

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List of Acronyms

Abbreviation	Definition
afy	acre-feet per year
amsl	above mean sea level
AQMP	Air Quality Management Plan
bgs	below ground surface
Cr6	hexavalent chromium
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CMU	concrete masonry unit
CO	carbon monoxide
dBA	decibel
DWR	Department of Water Resources
EDR	Environmental Database Report
EIC	Eastern Information Center
EIR	Environmental Impact Report
FRAP	Fire and Resource Assessment Program
GHG	greenhouse gases
gpm	gallons per minute
IS/MND	Initial Study / Mitigated Negative Declaration
LOS	Level of Service
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MCL	maximum contaminant level
MLD	Most Likely Descendant
MMT	million metric tons
MSHCP	Multiple Species Habitat Conservation Plan
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O3	ozone
OSHA	Occupational Safety and Health Administration
PM10	particulate matter (less than 10 microns)
PM2.5	particulate matter (less than 2.5 microns)
ppm	parts per million
PPV	Peak Particle Velocity
RCFCWCD	Riverside County Flood Control and Water Conservation District

Abbreviation	Definition
RCFD	Riverside County Fire Department
SBA	strong base anion
SCAQMD	South Coast Air Quality Management District
SGPWA	San Gorgonio Pass Water Agency
SO2	sulfur dioxide
SoCAB	South Coast Air Basin
SRA	Source Receptor Area
SRA	State Responsibility Area
SWRCB	State Water Resources Control Board
UCR	University of California, Riverside
USACE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service
VdB	vibration decibels
VHFHSZ	Very High Fire Hazard Severity Zone
WRF	Water Reclamation Facility
WSCP	Water Shortage Contingency Plan

1. Introduction

Project Title:	Well C-8 Project
Lead Agency Name and Address:	City of Banning 99 East Ramsey Street Banning, CA 92220
Contact Person and Phone Number:	Luis Cardenas, Senior Civil Engineer Public Works Department, City of Banning 951-922-3143
Project Location:	Northern terminus of Thompson Avenue City of Banning, CA 92220
Project Sponsor's Name and Address:	City of Banning 99 East Ramsey Street Banning, CA 92220
General Plan / Zoning Designation(s):	Low Density Residential (LDR) (0-5 du/acre)
Specific Plan Designation(s):	Project Site: Open Space – Parks Adjacent Area: Medium and Low Density Residential
Date Prepared:	December 7, 2021

1.1 Overview

The City of Banning (City) proposes to undertake the Well C-8 project (the project) to construct a water supply well that will supplement the City's existing water supply to meet future demands. The project also provides treatment of this water to meet existing drinking water regulations with provisions for future treatment that will facilitate compliance with anticipated changes in the hexavalent chromium (Cr6) maximum contaminant level (MCL)[1].

The City of Banning provides water service to more than 30,000 residents and businesses through over 11,000 water connections. The City's potable water distribution system is comprised of active groundwater wells that extract water from the West Banning, Banning Bench, Cabazon, Beaumont, and Banning Canyon Storage Units.[2] Due to the City's future growth projections, new groundwater resources (i.e., drilling new well sites) are required to meet projected demands. Development of Well C-8 will allow the City to augment its existing water supply to meet the anticipated demand for water, maximize the City's ability to meet potential future regulatory changes, and maintain the existing level of service to customers.

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[1] The State of California released a new MCL for Cr6 in drinking water, effective July 1, 2014. Cr6 occurs naturally in the City's groundwater supply and some of the City's groundwater wells have observed Cr6 concentrations near or above the 2014 MCL. The 2014 MCL was later invalidated by the Superior Court of Sacramento County on May 31, 2017. The State Water Board is currently establishing a new MCL; due to the uncertainty of impending Cr6 regulations, the City is also considering the eventual need for additional treatment for removal of Cr6 at Well C-8.

[2] The City is located within the San Gorgonio Pass Subbasin, a large subbasin which underlays the Coachella Valley Groundwater Basin. The San Gorgonio Pass Subbasin is divided into water storage units based on boundaries established in the 2006 USGS report on Groundwater Hydrology, in the San Gorgonio Pass Area.

The proposed project site is located on a parcel within the Atwell development, a master planned community project that encompasses over 1,543 acres and includes approximately 4,900 residential dwelling units, commercial sites, schools, and community parks and open space. The development will be constructed in eight phases over an estimated period of 30 years and was previously evaluated in the Butterfield Specific Plan Environmental Impact Report (SCH #2007071149). The City, in coordination with the developer, Tri Pointe Homes (formerly Pardee Homes), identified the proposed project location for Well C-8 (project site). This project site is located within the area designated as Phase 2A of the Butterfield Specific Plan (Tentative Tract #37389) and has not yet been developed.

1.2 Authority

The City is the lead agency for the Well C-8 Project. The City undertook a review of the proposed project, and determined that it is a project, as defined by the California Environmental Quality Act (CEQA). The City further determined that the project has the potential to impact the environment, and that an Initial Study should be prepared. This Initial Study has been prepared in accordance with CEQA, Public Resources Code Section 21000 et. seq. Based on the findings contained in this document, a Mitigated Negative Declaration is proposed.

1.3 Scope of Environmental Review

Consistent with the requirements of CEQA, this Initial Study addresses the required topics contained in Appendix G of the CEQA Guidelines, as follows:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology / Soils
- Greenhouse Gas Emissions
- Hazardous and Hazardous Materials
- Hydrology / Water Quality
- Land Use Planning
- Mineral Resources
- Noise
- Population / Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities / Service Systems
- Wildfire

1.4 Impact Assessment Terminology

The CEQA Guidelines' Appendix G identifies impacts using four levels of significance:

- **No Impact**: When the analysis finds that the project would not affect the environment.
- **Less than Significant**: When the analysis finds that a project would not substantially impact the environment and no mitigation is needed to reduce an impact to less than significant levels.
- **Less than Significant with Mitigation Incorporated**: When the analysis finds that a project would result in a substantial impact on the environment, but feasible mitigation measures can be implemented to reduce these impacts to less than significant levels.
- **Potentially Significant**: When the analysis finds that a project would result in a substantial impact on the environment, and no mitigation measures can be feasibly implemented to reduce those impacts to less than significant levels without additional analysis.

1.5 Organization of the Initial Study

This Initial Study has been completed using the following format:

- **Chapter 1 Introduction**: This chapter includes a brief summary of the proposed project and describes the regulatory framework for the preparation of an Initial Study under CEQA.
- **Chapter 2 Project Description**: This chapter includes a comprehensive description of the applicant's proposal, the General Plan and Zoning for the project site and the land uses which surround the project.
- **Chapter 3 Environmental Checklist / Environmental Evaluation**: This chapter contains the analysis of each issue area mandated by the CEQA Guidelines, and includes a discussion of the environmental setting, the project's impacts, a determination of the significance of these impacts, and where necessary, mitigation measures.
- **Chapter 4 References**: This chapter identifies the documents used for this initial study.

1.6 Documents Incorporated by Reference

In addition to those documents listed in Chapter 4, the City of Banning's General Plan, the Butterfield Specific Plan, Butterfield Specific Plan Environmental Impact Report (EIR) and Municipal Code were used in the evaluation of the proposed project. These documents are available online at https://banningca.gov/.

2. Project Description

2.1 Purpose and Need

The proposed project, sited on a parcel previously evaluated for potential impacts as part of the Butterfield Specific Plan Environmental Impact Report, December 2011, would provide additional water supply capacity to meet projected water demands within the City from growth anticipated in the near future that is attributed to infill and new developments.[3] In addition, the proposed project will allow the City to continue providing high quality drinking water that meets current and anticipated future drinking water quality regulatory standards. The proposed project allows for the City to augment supply, maximize the ability to meet potential future regulatory changes, and maintain the existing level of service to customers.

2.2 Project Location and Site Characteristics

The proposed the project is located in the southwestern portion of the City, Riverside County in southern California (**Figure 1**). The City encompasses an area of approximately 23 square miles and is located within the San Gorgonio Pass area of northwestern Riverside County. As shown in **Figure 2,** the project site is located north of Interstate 10, near the intersection of West Gilman Street and Thompson Avenue, directly north of the terminus of Thompson Avenue.

The project site is owned by Tri Pointe Homes (formerly Pardee Homes) and is located at a 0.51-acre parcel in the southeastern portion of the Atwell development. The project location is within an area of the Atwell development that has not yet been developed, designated as Phase 2A of the Butterfield Specific Plan, Tentative Tract No. 37389. The planned residential development to the north of the proposed site includes single-family homes, commercial development, and public buildings and may include gated entrances (City of Banning, 2011b). The property east of the proposed site is undeveloped private property that is also cleared, level land with little to no vegetation, and further east is an existing residential development.

The project site is primarily flat, with exposed dirt and partially vegetated with grasses (**Figures 3 through 6**). The lack of topographic relief is due in part to grading in the past to accommodate its prior use for farming and livestock grazing. The site's elevation is approximately 2,580 feet above mean sea level and gently slopes from northwest to southeast. There are no documented existing facilities or utilities at the project site.

The project site is located near the Banning fault, a component of the San Gorgonio fault system. The area is characterized by semi-arid badlands, alluvial plains, benches, and canyon watersheds. The area drains from the mountain areas through a series of canyons and drainage located along the mountain fronts (primarily from the San Bernardino Mountains) to the lowland areas of San Gorgonio Pass.

[3] The City of Banning Integrated Master Plan projects that future water demands would increase from approximately 5,302 acre-feet per year (afw) in 2014 to 7,018 by the year 2025 and 8,450 afy by 2040.

2.3 Surrounding Land Uses

To the north, the project site is largely bordered by undeveloped private property that is slated for the Atwell development. Land use for the planned development would be consistent with its zoning and include single-family homes, in addition to planned open spaces, commercial development, and public buildings. Beyond the planned development, the surrounding area north of the planned development is zoned as ranch/agricultural-hillside and contains open space, including the San Bernardino National Forest.

Existing residential development, institutional, and commercial development, West Gilman Street, and West Wilson Street are located south of the project site. South of West Gilman Street is a mix of existing single family and multifamily and commercial uses. Interstate 10 is located approximately 0.10-mile to the south of the project site and traverses in an east-west direction. Existing developments south of the site are zoned for low-density residential and high-density residential uses. Properties on the south side of Wilson Street are zoned for public facilities-hospital, professional office, high-density residential, and medium-density residential uses.

To the east, the project is bordered by undeveloped private property (i.e., the Atwell development), Highland Home Road, and existing residential development. The area for the C-8 well site is zoned for open space – parks and medium-density residential.

The project is bordered to the west by undeveloped private land, the Atwell development. As described above, the planned development would include single-family homes, open space, parks, commercial development, and public buildings, consistent with its zoning.

2.4 Proposed Project

To supplement its existing raw water supply, the City proposes a new well (C-8) and construction and operation of the wellhead and supporting facilities for the treatment and distribution of water from the new well. It is anticipated that the new well would have a pumping rate between 1,000 to 2,000 gallons per minute (gpm) of raw groundwater. On-site treatment of the water supply pumped at the new well would consist of chlorination. The treated water would flow to the existing water distribution system via 2,500 linear feet of a proposed 6- to 10-inch diameter pipe to an existing 18-inch diameter transmission main along Wilson Street. Treated water could also connect to a water transmission stub to be constructed as part of the development of Tentative Tract No. 37389.

The project would require drilling a new well and construction of ancillary facilities. The proposed project components are further described below and are shown in the site plan (**Figure 7)**.

- Well – The well would be drilled to a depth of approximately 1,100 feet below ground surface (bgs). The diameter of the well would be up to 48 inches to accommodate the well casing, screen, ancillary tubing, and seal.
- Well house – This structure would house the well, pump, motor, and electrical equipment. It is anticipated that the building would be approximately 35 feet long by 30 feet wide and 15 feet high. The well house would be constructed of concrete masonry unit (CMU) walls with a standing seam metal roof.

- Chlorination building – This structure would house the chlorination treatment system, including a feed system with metering pumps and storage tank. It would have a footprint of approximately 30 feet by 35 feet, with a height of 15 feet. The building would be constructed of CMU walls with a standing seam metal roof.

  The chemical would be delivered and stored in the form of bulk sodium hypochlorite solution (12.5 percent solution) for the disinfection of the raw water. The chemical would be stored in a 1,500 gallons storage tank, composed of a material appropriate for storage of sodium hypochlorite solution, to provide 30 days of storage capacity. The chemical storage tank would be located inside a concrete containment basin in the chlorination building. The containment basin would be designed and constructed to maintain 100 percent of the storage tank capacity to ensure that chemical storage at this project site would not result in a hazard to the surrounding built and natural environment.

- Surge tank – The surge tank, required to prevent potentially damaging changes in pressure due to loss of power or sudden changes in flow, would be approximately 15 feet wide by 15 feet long and up 20 feet high.

- Generator – A backup generator on a concrete pad would be provided for standby power and would be approximately 20 feet long by 25 feet wide by 10 feet high.

- Distribution Infrastructure – Approximately 2,500 linear feet of 6- to 10-inch diameter piping would be installed within the public right of way to connect the well site to the existing water transmission main located along West Wilson Street. Potential routes for the distribution piping would extend along: (1) Thompson Avenue, West Hoffer Street, and Kingswell Avenue; (2) West Gilman Street, Brinton Avenue, West Hoffer Street, and Kingswell Avenue; or (3) West Gilman Street and Kingswells Avenue. Alternately, treated water could also connect to the 18-inch water transmission stub to be constructed north of Thompson Street as part of development of Tentative Tract No. 37389.

- Access and Security – An access driveway would be constructed to accommodate service vehicles to the site from Thompson Avenue. Fencing or CMU wall with a gate would provide site security. After development of Tentative Tract No. 37389, additional access may be provided via the proposed roadway to be constructed as part of the development.

- Utilities and Stormwater Management – Connections to existing electric utilities would be required to serve the site. Electrical service would be provided either by connections to existing above-ground power lines extending from the southeastern corner of the parcel to Hoffer Street or by connections to underground power lines that would be installed in the right-of-way along Thompson Avenue. Alternatively, electrical service could be provided by connection to the power grid to be constructed as part of the development of Tentative Tract No. 37389. Stormwater management would be provided through onsite drain inlets and a new storm drain pipeline is proposed along the northern edge of the site which connects to existing storm drains south of the project site. Excess surface runoff would flow to a proposed drainage swale along the west and south property boundaries, and outlet to the existing storm drains along Thompson Avenue. If the well site is constructed prior to development of Tentative Tract No. 37389, storm water management would be

provided by surface drainage to Thompson Avenue to the south. If the well site is constructed after development of Tentative Tract No. 37389, stormwater management would be installed by the developer (i.e., Tri Pointe Homes). Sewer service may be provided via a sewer line to the existing sewer infrastructure along Thompson Avenue or the future development to support potential future treatment processes or facilities.

While operation of the well and treatment system is anticipated to be automated, City staff would conduct routine visits to the site. Additional operations at the site would include periodic chemical deliveries, up to several times per month. Traffic trip generation associated with operation of the well and treatment is anticipated to be less than one trip per day.

Potential Future Hexavalent Chromium (Cr6) Treatment

In the future, it may be determined that treatment of the raw water beyond chlorination is necessary to achieve compliance with the State of California's regulations regarding the permissible level of hexavalent chromium (Cr6) in drinking water. Two treatment options for Cr6 removal may be considered: the use of stannous chloride or strong base anion exchange (SBA). To accommodate the potential need for future treatment to meet the Cr6 drinking water MCL, a 30- by 40-feet area at the project site has been identified as a potential location for installing associated treatment equipment, as shown in **Figure 7**.

The stannous chloride treatment process involves adding stannous chloride to the water, allowing reaction time, and removing the tin and chromium particles that remain with a filter. Treatment equipment would include a chemical feed system, reaction tank, and filters. Periodically, particles will accumulate and increase pressure on the filters and the filters would need to be replaced. Replacement frequency is based on the water quality at the well and is estimated to be every one to three months, on average.

Under the SBA treatment option, water would be treated with the SBA process via a resin treatment vessel. The SBA resin capacity for Cr6 will periodically diminish and the resin will require regeneration. The resin regeneration process includes extraction of the resin from a resin treatment vessel at the well site, transportation to an approved and permitted offsite regeneration facility with capacity to regenerate resin from the proposed project, regeneration with a brine and return to the well site. Environmental impacts associated with the potential future use of equipment at an offsite regeneration facility either is not required or would be evaluated under a separate environmental review and is not further analyzed herein.

2.5 Construction

Construction of the proposed project would occur in two phases: (1) drilling the new well and (2) constructing the ancillary facilities. The proposed well would be drilled at the project site to a depth of approximately 1,100 feet below ground surface. Activities associated with drilling the new well would include installation of noise mitigating sound panels, mobilization, pilot borehole drilling, testing, well construction, survey, and site cleanup and restoration. Drill cuttings and fluids used to drill the well would be disposed of offsite at an appropriate facility by the drilling contractor. Truck

traffic associated with removal of drill cuttings and fluids during this phase of construction is anticipated to be approximately one truck trip per day.

Following drilling of the well, minor grading and construction of ancillary facilities including the wellhouse and chlorination building would begin. The surge tank and emergency backup generator would be installed. Distribution piping would be constructed extending from the well site to the transmission main in West Wilson Street. To provide electrical power to the site, existing aboveground utility poles extending from the project site to Hoffer Street would be replaced. Access and security improvements include installation of an access driveway and construction of perimeter fencing or wall. Activities associated with this phase of construction include mobilization, grading, trenching for the distribution piping, construction of the ancillary facilities, utility installation, equipment installation, paving, and site cleanup and restoration. Truck traffic during this phase of construction is not anticipated to exceed one truck trip per day.

Prior to construction, erosion and sediment control measures would be installed to minimize erosion and sedimentation associated with land disturbing activities during construction. These measures would be maintained throughout construction and removed as appropriate when the project site is stabilized. In addition, fugitive dust control measures would also be implemented to control and mitigate fugitive dust from dust-generating construction activities. Fugitive dust control measures could include minimizing disturbed areas, watering exposed areas and unpaved roads, reducing vehicle speeds on unpaved roads, and replacing ground cover.

2.5.1 Construction Equipment

Construction equipment and vehicles would vary depending on the construction activity and phase.

- Construction equipment and vehicles to support well drilling would include a drill rig, air compressor, generator, pumps, and tractors/loaders/backhoes, and dump/hauling trucks.
- Construction equipment and vehicles to support building ancillary facilities would include graders, rubber-tired dozers, tractors/loaders/backhoes, small crane, forklift, generator, vibratory roller and driver, cement and mortar mixers, and dump/hauling trucks.

2.5.2 Construction Schedule

The first phase of construction is not anticipated to exceed six months. Drilling the well would occur 24-hours a day, seven days a week for approximately six weeks, until the well is complete. This six-week duration would not be consecutive and would be spread over two months. After the well is drilled, construction of the ancillary wellhead facilities is not anticipated to exceed nine months, for a total construction period up to fifteen months. The fifteen months of construction would not be consecutive, and instead the two phases of the project will be spread out over a period of up to 24 months. Other than the well drilling, construction activities would generally be limited to the normal working hours established by the City, except when necessary due to weather or duration of a specific

activity.[4] Construction traffic would be routed along existing roads, including West Wilson Street, Kingswell Avenue, and West Hoffer Street and would enter the site via a construction entrance from Thompson Avenue.

2.6 Permitting and Regulatory Authorization Requirements

The following table lists the permits and approvals anticipated to be required to support the project.

Table 2-1. Anticipated Permits and Approvals

Regulatory Agency	Permit or Approval
State	
State Water Resources Control Board (SWRCB), Division of Drinking Water	• Water Supply Permit Amendment • National Pollutant Discharge Elimination System Stormwater General Permit and Stormwater Pollution Prevention Plan Approval
Regional / Local	
Regional Water Quality Control Board, Colorado River Basin Region	• General Permit for Construction Discharges (dewatering/test water) • Amendment to Drinking Water Permit
South Coast Air Quality Management District	• Permit to Construct • Permit to Operate
Riverside County Department of Environmental Health	• Well Permit
City of Banning	• Connection for Electrical Service

[4] This project would allow the City to augment water supply, maximizing its ability to meet potential future regulatory changes and maintain the existing level of service to customers, and is therefore in the interest of public health and safety. The duration of 24-hour, 7-days a week work is temporary (lasting up to six weeks over a duration of two months). Per under Municipal Code 8.44.090, this project would be exempt from the normal work hours established by the City and permission from the building inspector would be provided prior to the start of construction.

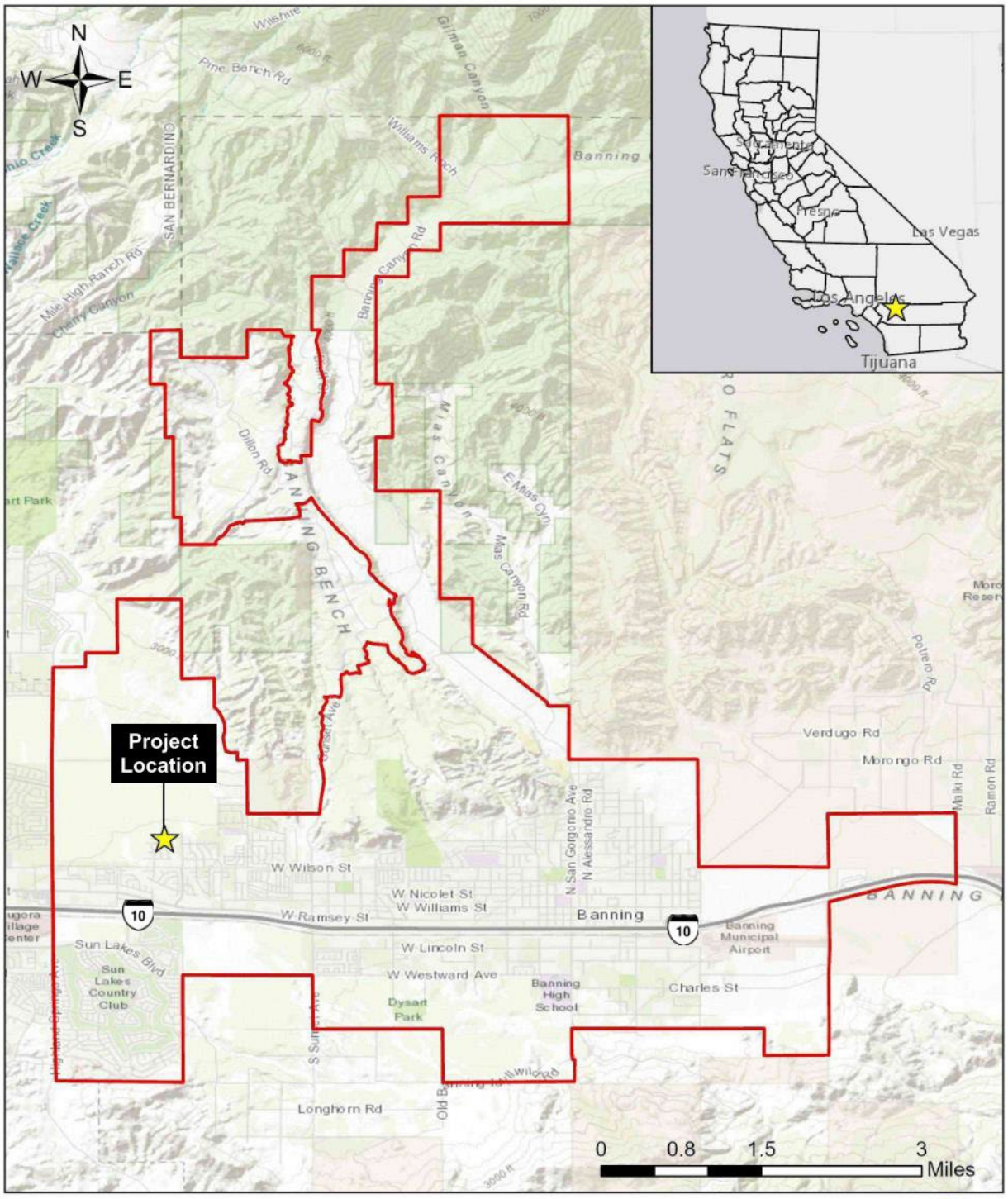

Figure 1. Regional Vicinity Map – Limits of the City of Banning, California

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JAN-2021

City of BANNING

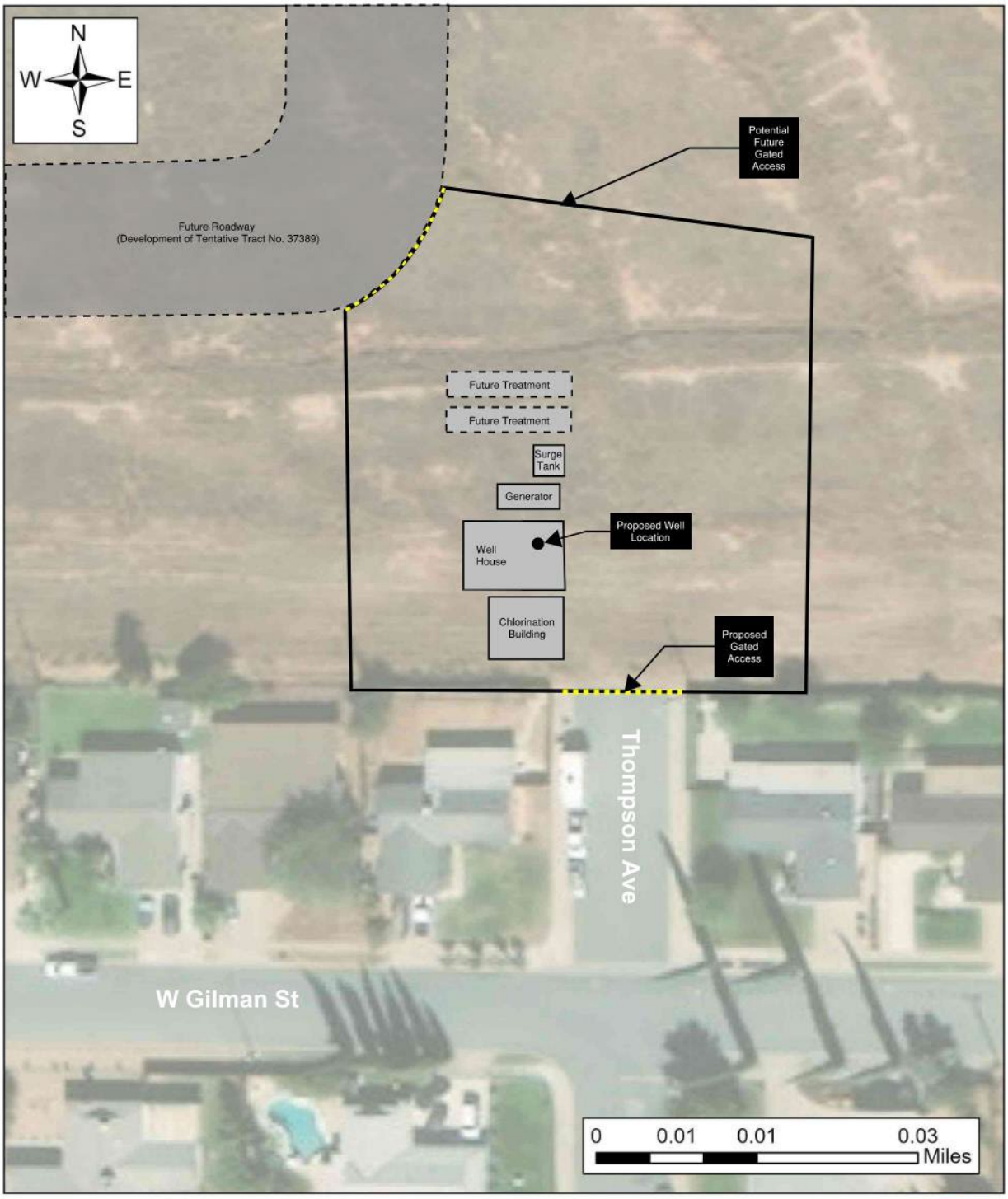
Figure 2. Project Vicinity Map

Figure 3. Site Photo - North from Thompson Avenue

Figure 4. Site Photo - South from Northern Boundary of Project Site

Figure 5. Site Photo – Looking East from Western Boundary of Project Site

Figure 6. Site Photo – Looking West from Eastern Boundary of Project Site



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JAN-2021

City of BANNING

Figure 7. Well C-8 Site Layout

3. Environmental Checklist / Environmental Effects

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, as indicated by the checklist and corresponding discussion on the following pages. With adherence to the mitigation program identified within this IS/MND, the potentially significant impacts would be reduced or minimized to a less than significant level.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☒ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

I find that the proposed project:

☐ COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Date

Purpose of this Initial Study

The Environmental Checklist below follows closely the form prepared by the Governor's Office of Planning and Research dated 2020 and other sources to screen and focus upon potential environmental impacts resulting from the proposed project. As discussed in Section 1.4, impacts are separated into the following categories:

- No Impact. This category applies when a project would not create an impact in the specific environmental issue area. A "No Impact" finding does not require an explanation when the finding is adequately supported by the cited information sources (e.g., exposure to a tsunami is clearly not a risk for projects not near the coast). A finding of "No Impact" is explained where the finding is based on project-specific factors, as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- Less Than Significant Impact. This category is identified when the project would result in impacts below the threshold of significance and would therefore be less than significant impacts.
- Potentially Significant Unless Mitigation Incorporated. This category is identified when the project would have a substantial adverse impact on the environment but could be reduced to a less than significant level with incorporation of mitigation measure(s).
- Potentially Significant Impact. This category is applicable if there is substantial evidence that a significant adverse effect might occur, and no feasible mitigation measures are foreseen to reduce impacts to a less than significant level. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

Sources of information that adequately support these findings are referenced following each question.

3.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

(Sources: Community Development Dept., 2006; City of Banning, 2011b; California Department of Transportation, 2019; City of Banning, 2016a; City Council of the City of Banning, 2012a; City Council of the City of Banning, 2012b)

Setting

The project is proposed to be constructed near the intersection of West Gilman Street and Thompson Avenue and is located within a 0.51-acre parcel in the southeastern portion of the Atwell development that will be constructed as part of Phase 2A of the Butterfield Specific Plan (Tentative Tract No. 37389). This portion of the planned development is generally flat, gently sloping from northwest to southeast, and vegetated with grasses. The proposed well site is abutted to the north and west by primarily flat, undeveloped private property that is slated for development. Existing residential, institutional, and commercial developments are located south of the project site consisting of a mix of existing single family and commercial uses roughly one- to two-stories tall. These developed areas include vegetation such as Italian Cypress and palm trees planted at intermittent intervals along the streets. East of the project site is bordered by undeveloped private property, and further east an existing residential development of homes that are roughly one- to two-stories tall. The project site has a view of the San Gorgonio mountains to the north and, from northern portions of the project site, the San Jacinto mountains to the south. Single-family homes along Thompson Avenue and West Gilman Street are also present in views from the project site looking south. Properties surrounding the project site are designated as Open Space, High Density Residential and Low Density Residential land uses (Community Development Dept., 2006). The *General Plan* shows the site as being within a Low Density Residential area, within the Banning City Limits.

Views of the site are currently from Thompson Avenue and West Gilman Street in the neighborhood that abuts the project site to the south. The site can also be seen from portions of Highland Home

Road to the east. In the future, once Phase 2A of the Butterfield Specific Plan (Tentative Tract No. 37389) is constructed, the project site would also be visible from publicly accessible neighborhood roadways to the north and west. In general, all views from the surrounding roadways, both existing and planned, would include perimeter fencing or a wall and the upper portions of the proposed 15-foot treatment and well house buildings, a 20-foot tall surge tank, and ancillary equipment up to 10-feet in height. The perimeter fencing/wall and structures would be constructed of materials common to the surrounding residential area including concrete masonry unit (CMU) walls and with a similar construction to other well sites in the City of Banning. The proposed buildings would be constructed with a standing seam metal roof and the roof and surge tank would be painted with non-reflective paint to reduce glare. During project construction and until Phase 2A of the Butterfield Specific Plan (Tentative Tract No. 37389) is implemented, temporary site access may be constructed along the eastern edge of the project site. This temporary access road would be visible from Thompson Avenue looking north. Construction truck traffic would be visible on the temporary roadway and at the project site.

Implementation of the project is expected to have less than significant impacts on aesthetic resources both during its construction and operation. The potential minor impacts to aesthetic resources are described in detail in the following section.

Discussion of Impacts

a, c, d) Less Than Significant Impact. Scenic vistas visible from the project site are the same as those present within the City and include the San Gorgonio mountains to the north and the San Jacinto mountains to the east. These vistas are identified in the City's General Plan as the City's most significant visual feature(s).

The proposed site is located adjacent to an existing neighborhood and a future residential development. Views to the west from Highland Home Avenue are far enough from the project site that the proposed site improvements would not obstruct views of the San Gorgonio mountains to the northwest. There are no existing publicly accessible views of the project site from the north looking south and east toward the San Jacinto mountains. Once Phase 2A of the Butterfield Specific Plan (Tentative Track 37389) is constructed, the project site will be amongst medium density residential housing. Therefore, views to the south and east toward the San Jacinto mountains will include both the project site and residential buildings. The incremental change in view of the San Jacinto mountains as a result of the proposed project site would not significantly alter the view from surrounding public roadways since the mountains would already be obstructed from this vantage point. The proposed site is also visible in northern views from Thompson and Gilman streets, in the foreground of the San Gorgonio vista. While proposed site improvements would alter views of the mountains from some portions of these streets, the structures at the project site would be constructed to blend into the surrounding medium density residential neighborhood, once complete, and the tank would not fully block views of the San Gorgonio mountains to the north. Therefore, the proposed project will not have a substantial adverse effect on a scenic vista.

The proposed project is located in an urbanized area within a Low Density Residential and

Medium Density Residential zoned area of 0-5 units per acre that allows for the development of attached and detached single family homes in traditional subdivisions and planned communities, and clustering of condominiums and townhomes with provisional common area amenities and open spaces (City of Banning, 2016; Community Development Dept., 2006). As noted above, the proposed site is within the future Atwell development in the portion that will include single-family homes, open space, parks, commercial development, and public buildings.

The project site is currently cleared, gently sloping land with little to no vegetation and proposed improvements would consist of perimeter fencing and walls, structures, a surge tank, and equipment. The fencing/wall and structures at the project site would be constructed of materials that will help them blend into the surrounding low- and medium density residential neighborhood, once constructed, and is not anticipated to fully block views of the San Gorgonio mountains further north. Therefore, the impact to visual character and visual quality as a result of the proposed project is expected to be less than significant.

Lighting levels will be regulated by City lighting standards and will be designed according to the City's Zoning Ordinance. The project site would include exterior security lighting on each side of the new well house and chlorination building at approximately 10 feet above grade and a new light pole adjacent to the generator in the event that maintenance is required at night. All proposed lighting would comply with local codes and will be shielded so that light is contained within the boundaries of the parcel on which the project site is located, directed away from adjoining properties and public rights-of-way. The impact of the proposed project's exterior lighting is anticipated to be less than significant. Due to the current and future development surrounding the proposed project site, the additional lighting is not anticipated to adversely affect or constitute a significant impact to the day or nighttime views in the area. In addition, the structures and surge tank would be painted with non-reflective or flat finish paint to reduce glare from the site.

b) **No Impact.** The nearest state scenic highway is approximately 2.8 miles away from the project site (California Department of Transportation, 2019). The proposed infrastructure is not anticipated to be visible from a state scenic highway. The proposed site is currently cleared, gently sloping land with little to no vegetation. Therefore, the proposed project will not have a substantial adverse effect on scenic resources.

Mitigation Measures

None.

3.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

(Sources: City of Banning, 2011b; DOC Farmland Map, 2021)

Setting

The proposed project site is located in the City. According to the 2016 City of Banning General Plan with Zoning Overlay and the Butterfield Specific Plan, the project area is designated as low density residential and open space. The project site has historically been used for livestock grazing. The State's Department of Conservation Important Farmland Map does not identify any portion of the project site as containing farmland of Prime or Statewide Importance.

Discussion of Impacts

a-b) **No Impact.** The project site is located on currently vacant land and is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland). The zoning designation for the project site is low density residential and is not designated as agricultural use. Neither the construction nor the operation of the project would conflict with a Williamson Act contract.

c-d) **No Impact.** The existing zoning designation for the project site is low density residential. The project would not conflict with existing zoning for or cause rezoning of forest land, timberland, or timberland zoned Timberland Production. Forestry land designations are not present at the project site; therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use.

e) **No Impact.** The project site is not located on or near any areas designated as forest land. While the proposed project will convert land designated as Farmland of Local Importance to a non-agricultural use, the project site has not supported any agricultural uses aside from occasional livestock grazing. Livestock grazing at the project site has ceased and, there is currently no agricultural activity on any adjacent or nearby properties. Further, the adjacent property to the north, east, and west is planned for development as part of the 1,543-acre planned community (the Atwell development). Conversion of the 0.51-acre project site to a non-agricultural use would not directly or indirectly catalyze the conversion of additional farmland to urban uses. For more information on potential impacts associated with groundwater quantity in the area, refer to Section 3.10 Hydrology/Water Quality.

Mitigation Measures

None.

3.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

(Sources: SCAQMD, 2017; SCAQMD, 2018; SCAQMD, 2019)

Setting

The project site is located in the South Coast Air Basin (SoCAB), a 6,000-square mile area bounded by the Pacific Ocean, and the San Gabriel, San Bernardino, and San Jacinto Mountains. The South Coast Air Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). All the development within the SoCAB is subject to the SCAQMD's 2016 Air Quality Management Plan. The SCAQMD operates and maintains regional air quality monitoring stations at numerous locations throughout its jurisdiction. The proposed project site is located within the Banning Airport Source Receptor Area (SRA 29); the closest air monitoring station is located at 200 South Hathaway Street, southeast of the project site.

Criteria air pollutants are contaminants for which the state and federal air quality standards have been established. The SoCAB exceeds federal standards for ozone (O_3), $PM_{2.5}$, and lead, and is in attainment/unclassified for CO, NO_2, SO_2, and PM_{10}. The SoCAB exceeds state standards for ozone (O_3), PM_{10}, and $PM_{2.5}$, and is attainment/unclassified for CO, NO_2, H_2S, sulfates, and vinyl chloride. These attainment levels are summarized in Table 3-1.

Table 3-1. National Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin

Criteria Pollutant	Standard	Averaging Time	Designation [A]	Attainment Date [B]
1-Hour Ozone	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 Originally 11/15/2010 (not attained) [c]
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone [d]	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm) 8-Hour (9 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	1-Hour (20 ppm) 8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO_2 [e]	NAAQS	1-Hour (0.10 ppm)	Unclassifiable/Attainment	N/A (attained)
	NAAQS	Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-Hour (0.18 ppm) Annual (0.030 ppm)	Attainment	---
SO_2 [f]	NAAQS	1-Hour (75 ppb)	Designations Pending (expect Uncl./Attainment)	N/A (attained)
	NAAQS	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)
PM_{10}	NAAQS	1987 24-hour (150 µg/m^3)	Attainment (Maintenance)g)	7/26/2013 (attained)
	CAAQS	24-hour (50 µg/m^3) Annual (20 µg/m^3)	Nonattainment	N/A
$PM_{2.5}$ [h]	NAAQS	2006 24-Hour (35 µg/m^3)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m^3)	Attainment	8/24/2016

Criteria Pollutant	Standard	Averaging Time	Designation [A]	Attainment Date [B]
	NAAQS	2012 Annual (12.0 µg/m^3)	Nonattainment (Serious)	12/31/2025
	CAAQS	Annual (12.0 µg/m^3)	Nonattainment	N/A
Lead	NAAQS	3-Months Rolling (0.15 µg/m^3)	Nonattainment (Partial) [i]	12/31/2015
Hydrogen Sulfide (H_2S)	CAAQS	1-Hour (0.03 ppm/42 µg/m^3)	Attainment	---
Sulfates	CAAQS	24-Hour (25 µg/m^3)	Attainment	---
Vinyl Chloride	CAAQS	24-Hour (0.01 ppm/26 µg/m3)	Attainment	---

Notes:
Source: SCAQMD, 2018

a) U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable
b) A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.
c) 1-hour O_3 standard (0.12 ppm) was revoked, effective June 15, 2005; however, the Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.
d) 1997 8-hour O_3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O_3 standard is still subject to anti-backsliding requirements.
e) New NO_2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO_2 standard retained.
f) The 1971 annual and 24-hour SO_2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO_2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.
g) Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM10 maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.
h) Attainment deadline for the 2006 24-Hour PM2.5 NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual PM2.5 standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m3. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.
i) Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.

The proposed project would construct and operate a well within a wellhouse, and an associated chlorination building, surge tank, backup generator, and conveyance piping. Operation of the well and chlorination treatment system will contribute to an incremental increase in NO_x, CO, PM and SO_x emissions associated with energy use at the well site and potential use of the backup generator under emergency conditions. However, given its limited size and scope, cumulative impacts are not expected to be considerable. In the future, if CR6 removal is pursued, additional emissions associated with the removal and disposal of spent media off site may be generated from hauling vehicles. Development of the well site and treatment facilities at the project site would result in short-term

impacts associated with site disturbance and construction and long-term impacts associated with mobile emissions and facility operations. Prior to construction, permits would be required from the SCAQMD to construct and operate the facility.

Air quality impacts associated with project construction and operation were evaluated using the California Emissions Estimator Model (CalEEMod 2020.4.0), a statewide land use emissions computer model. This model uses default data (e.g., emission factors) provided by the California Air Districts to account for local requirements and conditions, as well as project-specific inputs to quantify potential criteria pollutants and greenhouse gas (GHG) emissions. Project construction and operation could impact air quality and are further discussed below.

Discussion of Impacts

a) **No Impact**. The project site is located in the South Coast Air Basin and will be subject to the SCAQMD's 2016 Air Quality Management Plan (AQMP) (SCAMD, 2017). The AQMP is based, in part, on the land use plans of the jurisdictions in the region. The AQMP is a comprehensive plan that establishes control strategies and guidance on regional emission reductions for air pollutants. The proposed project is consistent with the City's land use designations assigned to the subject property, as described in Section 3.11. Therefore, the proposed project is consistent with the intent of the AQMP and would not conflict with or obstruct implementation of the applicable air quality plan. No impact associated with compliance with applicable management plans is expected.

b) **Less than Significant Impact.** The project site is located in the South Coast Air Basin, which is classified as a "non-attainment" area for ozone, PM_{10}, $PM_{2.5}$, and lead. To achieve attainment in the region, a comprehensive emission control strategy is outlined in the South Coast AQMP, including traditional regulatory control measures (such as reductions on emissions from combustion equipment, fugitive dust control measures), incentive-based programs, and mobile source strategies. The proposed project would contribute to an incremental increase in NOx, VOC, PM10, PM2.5, and CO during construction and nominal increases during operation. Summaries of these emissions as estimated in CalEEMod are provided below in Tables 3-2 through 3-5. Model run outputs from CalEEMod are provided in Appendix A. Given its limited size and scope, cumulative impacts are not expected to be considerable. Project construction and operation emissions would not exceed SCAQMD thresholds for any criteria pollutants under mitigated conditions. The project will not conflict with any attainment plans and will result in less than significant impacts.

Table 3-2. Maximum Daily Construction-Related Emissions Summary (pounds per day) – Well and Ancillary Facilities

	NO_x	VOC	PM_{10}	$PM_{2.5}$	SO_x	CO	Lead
Construction	28.71	3.04	12.84	3.84	0.08	28.08	-
SCAQMD Thresholds[1]	100	75	150	55	150	550	3
Exceeds?	No	No	No	No	No	No	-

[1] Source: South Coast Air Quality Management District Air Quality Significance Thresholds (Revision April 2019)

Table 3-3. Maximum Daily Operation-Related Emissions Summary (pounds per day)

	NO_x	VOC	PM_{10}	$PM_{2.5}$	SO_x	CO	Lead
Operational Emissions	0.02	0.01	1.863E-03	1.86E-03	1.50E-04	0.02	-
SCAQMD Thresholds[1]	55	55	150	55	150	550	3
Exceeds?	No	No	No	No	No	No	No

[1] Source: South Coast Air Quality Management District Air Quality Significance Thresholds (Revision April 2019)

Table 3-4. Maximum Daily Construction-Related Emissions Summary (pounds per day) – Future Cr6 Treatment

	NO_x	VOC	PM_{10}	$PM_{2.5}$	SO_x	CO	Lead
Construction	9.75	0.95	3.53	0.71	0.02	9.53	
SCAQMD Thresholds[1]	100	75	150	55	150	550	3
Exceeds?	No	No	No	No	No	No	-

[1] Source: South Coast Air Quality Management District Air Quality Significance Thresholds (Revision April 2019)

Table 3-5. Maximum Daily Operation-Related Emissions Summary (pounds per day) – Future Cr6 Treatment

	NO_x	VOC	PM_{10}	$PM_{2.5}$	SO_x	CO	Lead
Construction	0	5.70E-04	0	0	0	1.00E-04	-
SCAQMD Thresholds[1]	55	55	150	55	150	550	3
Exceeds?	No	No	No	No	No	No	-

[1] Source: South Coast Air Quality Management District Air Quality Significance Thresholds (Revision April 2019)

c) **Less than Significant Impact**. The nearest sensitive receptors to the well site are single family homes located immediately south of the project site.

To determine if the proposed project has the potential to generate significant adverse localized impacts, the mass rate Localized Significance Threshold (LST) Look-up Table was used. The City and the project area are within SRA 29 (Banning Airport). Based on the project site area of 0.51 acres, the 1-acre site tables at a distance of 25 meters were used to analyze LSTs associated with the construction and operation of the proposed project. Emission estimates for construction were calculated for CO, NO_x, PM_{10}, and $PM_{2.5}$ using the CalEEMod model created for a typical well drilling project in this region. Model run outputs from CalEEMod are provided in Appendix A.

As shown in Table 3-6, LSTs will not be exceeded under mitigated conditions for all criteria pollutants. Therefore, air quality impacts to nearby sensitive receptors during construction will be less than significant.

Table 3-6. Localized Significance Thresholds (pounds per day)

	NO_x	CO	PM_{10}	$PM_{2.5}$
Well and Ancillary Facilities - Construction	4.57	37.07	4.33	1.35
Future Cr6 Treatment – Construction	0.65	10.09	1.56	0.24
LST Threshold	103	1000	6	4
Exceed?	No	No	No	No

Emission Source: CalEEMod model, version 2020.4.0
LST Threshold Source: LST Mass Look-up Table, SCAQMD

d) **Less than Significant Impact**. The proposed project is not anticipated to generate any other emissions (such as those leading to objectionable odors) during construction or operation. Short term odors associated with paving and construction activities could be generated;

however, any such odors would be dispersed below detectable levels. Therefore, impacts from other emissions are expected to be less than significant.

Mitigation Measures

None.

3.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

(Sources: City of Banning, 2011a; CDFW 2012, RCA MSHCP Information Map, 2021)

Setting

Ground cover at the project site is primarily exposed dirt. As it was formerly used for occasional cattle grazing, patches of vegetation present at the project site includes non-native grassland typical of grazing including brome grasses (*Bromus diandrus, B. madritensis, B.hordeaceus*), Mediterranean barley (*Hordeum murinum*), oats (*Avena sp*.), short-podded mustard (*Hirschfeldia incana*), winter vetch (*Vicia villosa*) and/or wild radish (Raphanus sativus). Other common species occur in localized areas. The area is subject to disturbances associated with grazing including soil compaction and waste deposition.

A habitat assessment of the site was conducted as part of the Butterfield Specific Plan EIR in September 2010 by Natural Resource Consultants. General biological surveys of the Atwell development were completed in May 2005 and September 2006 and updated in March through

August 2010. The Atwell development comprises over 1,543 acres, including the proposed project site. Desktop research indicated that there are nine special-status communities, 31 sensitive or special-status plant species, and 36 sensitive or special-status wildlife species recorded within the *Yucaipa, Forest Falls, San Gorgonio Mountain, El Casco, Beaumont, Cabazon, Lakeview, San Jacinto and Lake Fulmor* quadrangles within the California Natural Diversity Database or otherwise known to occur in the region. Based on the surveys conducted at the Atwell development, no special-status vegetation communities are present at the project site. In addition, the project site provides only marginally suitable habitat for special status plant species due to previous disturbance associated with its former use as an area of livestock grazing. No sensitive plant species were detected on the project site during the habitat assessment. The project site is within the *Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP) survey area for burrowing owl (*Athene cunicularia).* The biological surveys previously conducted for the Butterfield Specific Plan EIR indicated that the Atwell development contains marginally suitable habitat for the burrowing owl and several individuals were observed in 2007 and 2010. However, burrowing owl suitable habitat and the burrowing owl sightings are located over 2,000 feet away from the proposed project site. Six sensitive wildlife species, including the double-crested cormorant (*Phalacrocorax auritus*), northern harrier (*Circus cyaneus*), California horned lark (*Eremophila alpestris actia, SC*), loggerhead shrike (*Lanius ludovicianus*), coyote (*canis latrans*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), were observed on or flying over the Atwell development site during the previously conducted biological surveys.

The Atwell development includes several US Army Corps of Engineers (USACE) non-wetlands waters / California Department of Fish and Wildlife (CDFW) Unvegetated Streambed, including Smith Creek, an ephemeral and braided drainage system located approximately 1,500 feet west of the proposed project site and an unnamed tributary approximately 150 feet northeast of the project site. However, the proposed project site does not support any jurisdictional waters, riparian/riverine habitats, ephemeral drainage features, or vernal pools.

Discussion of Impacts

a) **Less than Significant Impact with Mitigation Incorporated**. The proposed project would include construction of a groundwater well, supporting structures, conveyance and connections to existing utilities within a 0.51-acre site that has already been disturbed. As the project is located within jurisdictions of the MSHCP co-permittees (i.e., the City), a Consistency Analysis for the proposed project would be required prior to development (see BIO1). The project site is not located within a designated criteria cell[5] or conservation area. The only potentially occurring special-status species covered by the MSHCP and observed in the vicinity of the project site is the double-crested cormorant (*Phalacrocorax auritus*).

[5] Per the Regional Conservation Authority of Western Riverside County, a criteria cell is a roughly 160-acre rectangle that overlays parcels within the MSHCP Plan Area that has areas ascribed for conservation. Development within a criteria cell (other than a single-family home) triggers the Habitat Evaluation and Acquisition Negotiation Strategy and Joint Project Review (JPR) discretionary approval.

Though six sensitive wildlife species were observed during the natural resource surveys previously conducted across the 1,543-acre Atwell development site, given the lack of suitable habitat on the 0.51-acre project site, there is low potential for the proposed project to adversely impact sensitive biological resources known to occur in the project vicinity. Further, the project site is within the future Atwell development in the portion that would be constructed during the Phase 2A Butterfield Specific Plan (Tentative Tract No. 37389); this development would border the northern, western, and eastern boundaries of the project site, minimizing the future potential for biological resources to occur at the project site. The area directly south of the project site is already developed as single-family homes.

The project site is within an MSHCP survey area for burrowing owl (*Athene cunicularia).* As noted above, suitable habitat for burrowing owl and individuals were observed approximately 2,000 feet away from the project site. If they were to occur at the project site, impacts resulting from implementation of the proposed project would be considered significant and require mitigation pursuant to the requirements of the MSHCP. Therefore, Mitigation Measure BIO2, which requires pre-construction surveys for this species within 30 days prior to grading activities on the site and passive relocation of any burrowing owls found during those surveys, has been recommended to mitigate potential adverse impacts.

There are limited patches of vegetation existing on the project site that could impact nesting birds covered by the Migratory Bird Treaty Act (MBTA). The MBTA prohibits disruption of active nests. Clearing and grading activities could impact nesting birds during the active nesting period of February 1 to August 31. If vegetation removal is planned for this period, or if vegetation is remaining but construction is to occur immediately adjacent to suitable nesting locations (including shrubs), impacts to species protected under the MBTA could be significant. In order to adequately mitigate this impact, pre-construction surveys for nesting birds shall be conducted prior to the beginning of activities and is included as mitigation measure BIO2, below. Should nesting birds be identified, the nest shall be buffered and no disturbance shall occur until the young have fledged.

With implementation of mitigation measures, impacts associated with sensitive species potentially occurring on or in proximity to the project site will be reduced to less than significant levels.

b, c) **No Impact**. The proposed project would not impact riparian habitat or sensitive natural communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. The project site is not located on land that is classified as either riparian habitat or a sensitive natural community. The project site is located southwest of an unnamed ephemeral tributary; however, no project activities would occur on or within the drainage area of the unnamed tributary and therefore there will be no impacts.

d) **No Impact**. A wildlife corridor is typically a link of wildlife habitat, generally containing native vegetation, which joins two or more larger areas of similar wildlife habitat. Regionally, wildlife movement occurs in the San Bernardino Mountain foothills to the north and east of the site. Surrounding development and other forms of human activity have disturbed the project site for a number of years. As noted in the Butterfield Specific Plan EIR, on-site

biological surveys found no evidence of wildlife corridors or habitat linkages at the Atwell development. Further, the proposed project site is planned to be surrounded by residential development at each of the project site's boundaries. Therefore, the proposed project site does not function as a migratory wildlife corridor or nursery site and no project related impacts would occur.

e) **No Impact**. The City executed the Implementing Agreement with the County on November 23, 2003 and adopted Ordinance 1304 on November 12, 2003, which amended its Municipal Code to establish procedures and requirements for the implementation of the MSHCP. A MSCHP Consistency Analysis is required for all discretional projects within jurisdictions MSHCP co-permittees, including the City (see BIO1). Therefore, there would be no project related impacts.

f) **Less than Significant**. The proposed project is within the MSHCP area; however, it is not located within a criteria cell. As such, the proposed project would avoid direct impacts to the MSHCP and would not conflict with conservation objectives. As the project is located within jurisdictions of the MSHCP co-permittees (i.e., the City), a Consistency Analysis for the proposed project would be required prior to development (see BIO1).

Further, the project site is located within an MSCHP survey area for burrowing owl. Burrowing owl suitable habitat and several individuals were observed in previous surveys in locations over 2,000 feet from the project site. If they were to occur, impacts resulting from the proposed project would be considered significant and would require mitigation pursuant to the requirements of the MSHCP and CDFW. Accordingly, Mitigation Measure BIO3, which requires pre-construction surveys for this species within 30 days but not earlier than 14 days prior to grading activities on the site and passive relocation of any burrowing owls found in the course of those surveys, has been imposed to mitigate potential adverse effects.

Mitigation Measures

BIO1 The City shall complete a Western Riverside County Multiple Species Conservation Plan Consistency Analysis.

BIO2 If land disturbance is to be initiated during the nesting season (approximately mid-February through mid-August), all suitable habitat shall be surveyed for the presence of nesting birds by a qualified biologist prior to site disturbance. Should any active nests be identified, construction must comply with Migratory Bird Treaty Act requirements, including a 300-foot adequate construction buffer around active nests or avoiding construction during the nesting season if an adequate 300-foot buffer is infeasible.

BIO3 A pre-construction "take avoidance survey" for the burrowing owl shall be conducted by a qualified biologist no less than 14 days and not more than 30 days (in accordance with the Staff Report on Burrowing Owl Mitigation [CDFW 2012]) prior to groundbreaking activities. A final burrowing owl survey shall be conducted within 24 hours of the initiation of ground disturbance activities in accordance with the CDFW 2012 protocol.

If no burrowing owls are detected during those surveys, implementation of ground disturbance activities may proceed. If burrowing owls are detected during the take avoidance surveys, avoidance and minimization measures shall be required. Avoidance and minimization measures include: establishing a buffer zone, installing a visual barrier, and implementing burrow exclusion and/or closure techniques, in conformance with CDFW protocol and the MSHCP.

3.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

(Sources: City of Banning, 2011a)

Setting

The City is located within the San Gorgonio Pass, which has been used by prehistoric and historic peoples traveling between the Mojave Desert and the Los Angeles Basin. The area is within the traditional cultural territory of the Cahuilla, semi-nomadic hunter-gatherers whose migration into southern California occurred sometime between 1000 BC and AD 500. The Cahuilla lived in permanent villages, though they also occupied seasonal camps. The Western Cahuilla had villages at Banning, among other locations in and around the San Gorgonio Pass area and western Coachella Valley.

In the Late Prehistoric Period (defined as after AD 1000 until around the late 1700s), foreign influences at the San Gorgonio Pass included the establishment of a number of settlements and rancherias. Non-Indian settlements in the area expanded in the late 19th century, with the establishment of railroad stations and the implementation of the Homestead Act and Desert Land Act. The City was founded in 1884 and incorporated in 1913, located strategically at the intersection of various transportation arteries and roughly halfway between the Riverside-San Bernardino Area and the desert resort communities in the Coachella Valley.

Due to its historical and cultural archaeological resources, portions of the City near known settlements or historic properties are designated as moderate to high sensitivity. However, the project site itself is located within an area of the City that is designated as low sensitivity for both historical resource and archaeological resource sensitivity (City of Banning, 2011a).

A cultural resources investigation was conducted by LSA Associates, Inc. for the Butterfield Specific Plan EIR, which encompasses the area of the project site. The investigation included a records search at the Eastern Information Center (EIC), located at the University of California, Riverside (UCR); a review of the National Historic Register of Historic Places, and documents and inventories from the California Office of Historic Preservation; a field survey conducted in 2006; a Native American Consultation initiated in March 2006; and additional archival research and eligibility evaluations.

Discussion of Impacts

a) **Less Than Significant.** The project site is located in an area considered to have low sensitivity for historic-period buildings according to the City of Banning General Plan (City of Banning, 2006). Data from the EIC stated that 12 cultural resource studies had taken place resulting in the recording of 10 archaeological sites and nine built environment cultural resources within one mile of the Atwell development, which encompasses the project site. No previously recorded cultural or archaeological sites exist within the project site. The intensive survey and historical research of the area investigated for the Butterfield Specific Plan EIR identified three historic sites and four historic isolated artifacts within the Atwell development. The historic sites were evaluated and considered noneligible for the National or California Registers. Historic research revealed minimal data potential for only one of the three sites, a refuse scatter site more than 1.5 miles north of the project site. Therefore, impacts will be less than significant.

b) **Less Than Significant.** The project site is located in an area considered to have low sensitivity for archaeological resources according to the City of Banning General Plan (City of Banning, 2006). As discussed in 3.5a Appendix D, Cultural Resources Assessment, EIC records showed 10 archaeological sites and nine built environmental cultural resources within one mile of the Atwell development, but no previously recorded sites within the proposed project site. The previously conducted cultural assessment found four historic isolated artifacts and three historic sites within the Atwell development; no prehistoric or historic cultural resources were found on the project site. Further, archaeological resources are unlikely to be discovered within the project site since excavation is limited to minor grading, drilling the well, and linear excavation for the distribution piping to a maximum depth of up to ten feet bgs for proposed utility lines, a majority of which would occur within previously disturbed public right-of-way.

   The Native American Heritage Commission (NAHC) was contacted on March 9, 2006 as part of the Tribal Consultation conducted by the City for the Butterfield Specific Plan EIR (see Section 3.18 Tribal Cultural Resources). None of the Native American groups identified any cultural resources that might be impacted within the Butterfield Specific Plan area, which encompasses the project site. The Augustine, Ramona, and Morongo Bands of Mission Indians all recommended Native American Monitoring. This mitigation measure is provided below (see CUL1). The monitor will be qualified to identify a resource and recommend how it is to be handled, whether through excavation and curation, or preservation in place, and would make those recommendations if resources are identified. With this mitigation measure in place, the impacts will be less than significant.

c) **Less Than Significant**. The proposed project site is not located on any known cemetery. However, if human remains are encountered during construction, in a location other than a dedicated cemetery on non-federal land, the steps and procedures specified in the California Health and Safety Code §7050.5 (HSC 7050.5), State CEQA Guidelines 15064.5(d), and the California Public Resource Code §5097.98 (PRC 5097.98), in accordance with PRC 5097.98, would be implemented. In accordance with PRC 5097.98, the Riverside County Coroner must be notified within 24 hours of the discovery of potential human remains. The Coroner must

then determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she must contact the NAHC by phone within 24 hours, in accordance with PRC 5097.98. The NAHC then designates a Most Likely Descendant (MLD) with respect to the human remains within 48 hours of notification. The MLD will then have the opportunity to recommend to the Project proponent means for treating or disposing of, with appropriate dignity, the human remains and associated grave goods within 24 hours of notification. Therefore, impacts will be less than significant.

Mitigation Measures

CUL1 A Tribal monitor may be present during ground disturbing activities. Should a resource be uncovered by these activities, all work in that area shall be halted or diverted until the monitor can evaluate the nature and significance of the find and provide written recommendations. Monitors shall be empowered to redirect work activities, to inspect identified resources, and to direct their ultimate disposal, whether through documentation and curation, or preservation in situ.

3.6 Energy

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

(Sources: City of Banning, 2021a; City of Banning, 2021b)

Setting

The City is a full-service community providing electric, water, wastewater and trash utilities to its population. The project site is served by Banning Electric Utility (Banning Electric) for electricity, a not-for-profit, publicly owned retail electrical energy distribution utility with 134 miles of power lines serving nearly 13,500 citizens and business patrons. Banning Electric's energy service territory covers the City. The proposed project area is served by the Southern California Gas Company for natural gas. The City's facilities are powered by electricity supplied by Banning Electric. The well site would require connections to existing electric utilities to serve the site. Electrical service would be provided by connections to existing above-ground power lines or alternately, to underground power lines to be installed in the right-of-way along Thompson Avenue. As shown in **Figure 7**, Well C-8 Site Layout, a backup generator would be provided for standby power.

Discussion of Impacts

a) **Less Than Significant Impact.** The proposed project consists of the drilling of a new well and construction of supporting facilities and would be constructed using typical construction equipment and practices. Construction of the proposed project would require the use of fossil fuels (primarily gas, diesel, and motor oil) for equipment, material hauling, and delivery and worker vehicles. Construction vehicle traffic is further described in Section 3.17, Transportation. Direct energy use would also include the use of electricity required to power construction equipment (e.g., electric power tools). All construction vehicles and equipment, listed in Table 3-7, would be required to comply with the federal and state regulations guiding the use of construction vehicles and equipment, including the California Air Resources Board (CARB) Off-Road Zone Regulation.

Table 3-7. Construction Equipment List

Construction Phase	Duration	Anticipated Fleet	Usage (hours/day)
Drill New Well	6 months	Graders Rubber Tired Dozers Tractors/Loaders/Backhoes Drill Rig	6 8 8 24
Construction of Ancillary Facilities	9 months	Paving Equipment Rollers Tractors/Loaders/Backhoes	8 8 8

Drilling of the well is not anticipated to exceed six months; after the well is drilled, construction of the supporting wellhead facilities is not anticipated to exceed nine months, for a total construction period not to exceed 15 months; these two phases of construction would not be consecutive and would be spread out over a period of up to 24 months. The proposed project would not require any unusual or excessive construction equipment or practices that would result in wasteful, inefficient, or unnecessary consumption of energy. Due to the temporary nature of the construction activities and compliance with applicable energy regulations, construction-related energy use is expected to have a less than significant effect on energy resources.

The operational energy use of the proposed project would include infrequent routine trips associated with maintenance of the well site and facilities (as described in Section 3.17, Transportation); and the operation of the wellhead and supporting facilities for treatment and distribution of the new water supply source. In the future, energy use at the project site could increase to power treatment equipment associated with Cr6 treatment. A backup generator would be provided for standby power for the well site and facilities operation. Electrical service would be provided by connections to existing power lines adjacent to the site served by Banning Electric. Operational energy use is expected to have a less than significant effect on energy resources.

b) **Less Than Significant Impact.** Implementation of the proposed project will not result in inefficient, unnecessary, or wasteful consumption of energy, as outlined above. The proposed project would be required to comply with state and federal energy conservation measures related to construction and operations, including CARB Off-Road Zone Regulation and the Rule for On-Road Heavy-Duty Diesel-Fueled Public and Utility Fleets. As such, the proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency during construction or operation; impacts will be less than significant.

Mitigation Measures

None.

3.7 Geology/Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

(Sources: USGS, 2006; Hazen, 2020; DWR, 2004; DOC, 2018; DOC, 1995, USGS, 2016; DOC Liquefaction, 2021; DOC, Landslide Inventory, 2021; County of Riverside, 2019; City of Banning, 2021; DOC Geological Map, 2021; Community Development Dept., 2006; Community Development Dept., 2006; Caltrans, 2014)

Setting

The City encompasses an area of approximately 23 square miles and is located within the San Gorgonio Pass area of northwestern Riverside County, approximately 80 miles east of Los Angeles and 20 miles west of Palm Springs. San Gorgonio Pass is situated between the Transverse Ranges, Colorado Desert, and Peninsular Ranges geomorphic provinces. Topographic elevations within the San Gorgonio Pass and surrounding mountain ranges vary from approximately 2,000 feet above mean sea level (amsl) to greater than 10,000 feet amsl. The City is situated at an elevation of approximately

2,300 feet amsl between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. The area is characterized by semi-arid badlands, alluvial plains, benches, and canyon watersheds (USGS, 2006). Surface water drains from the mountain areas through a series of canyons and drainages located along the mountain fronts (primarily from the San Bernardino Mountains) to the lowland areas of San Gorgonio Pass. Alluvial sediments in this area include younger (Holocene age) and older (Pleistocene age) alluvium overlying the Upper and Lower San Timoteo Formation (Pliocene and Pleistocene age). The older alluvium consists of varying amounts of poorly-sorted gravel, sand, silt, and clay (DWR, 2004).

The San Andreas Fault system is structurally complex and heavily faulted. The dominant geologic structure within the area is the Banning Fault, extending from the Indio Hills to the San Andres fault (Butterfield Specific Plan, 4,7 Geology section). The San Gorgonio Pass Fault Zone consists of a series of Quaternary-age reverse, thrust, and tear faults extending from the Calimesa to Whitewater areas (USGS, 2006). This fault zone exhibits a distinctive zig-zag geometry formed by L-shaped fault patterns, including the Banning, Central Banning, and Eastern Banning Barrier Faults (USGS, 2006).

The region is susceptible to a range of geologic hazards, including ground rupture, major ground shaking, slope instability, and collapsible and expansive soils. Strong sustained winds emanating from the San Gorgonio Pass cause wind erosion and transport and deposit dry, finely granulated, sandy soils on the central valley floor.

Development of the project site, well, and associated structures could be impacted by geologic hazards and impact soil resources and is discussed further below.

Discussion of Impacts

a.i) No Impact. According to the California Department of Conservation (DOC, 2018) Earthquake Fault Zones map, the project site is not located in an Alquist-Priolo Earthquake Fault Zone (DOC, 1995). The nearest earthquake fault zone is the San Gorgonio Pass Fault (San Gorgonio Pass Fault Zone), which is located approximately 1-mile east of the proposed project (DOC, 1995). The proposed project is not regulated by the Alquist-Priolo Act (DOC, 2018). There will be no impact associated with rupture of a known earthquake fault.

a.ii) Less Than Significant Impact. The proposed project is located in a seismically active region where earthquakes originating on local and regional seismic faults can produce severe ground shaking and where significant ground shaking will occur during a sizable earthquake. This intensity range (IX – X) (USGS,2016) can result in partial or complete collapse of buildings, their foundations, and underground pipelines depending on the structures construction and substrate. To reduce impacts associated with ground shaking on people and buildings, the City implements the latest seismic safety design standards of the California Building Code (CBC) except where noted in the City of Banning Code of Ordinances, Chapter 15.24 – Earthquake Resistance Standards. The City of Banning Code of Ordinances provides regulations for collapse-resistant design, which will be enforced during structure design and construction. Impacts at the project site from strong seismic ground shaking will be less than significant because the facility will not result in a habitable structure and are therefore less than significant.

a.iii) Less Than Significant Impact. The proposed project is not located in an area that has a high susceptibility to liquefaction (DOC, Liquefaction). Onsite underlying soils consist of clay, silt, and fine-grained sand (Qoa; Older Alluvium), which are soft, expansive, and could be susceptible to liquefaction. However, for liquefaction to occur, groundwater levels must be within 50 feet of the ground surface. Based on review of recent historical water levels within nearby wells, the depth to groundwater in the vicinity of the project site is estimated to occur at approximately 450 feet below ground surface (Hazen, 2020). Therefore, the soft clay, silt, and fine-grained sand in this region is not prone to liquefaction and project-related impacts will be less than significant.

a.iv) No Impact. The proposed project is not located within a landslide hazard area (DOC, Landslide Inventory). The project site consists of, and is surrounded by, primarily flat terrain vegetated with grasses; therefore, no impacts associated with landslides are anticipated.

b) Less Than Significant Impact. The proposed project is not located in an area that is susceptible to wind erosion (Riverside County General Plan). The proposed project would require clearing, grading, drilling, trenching, and other land disturbance that could result in the loss of topsoil and generate particulate matter. The project would be required to implement measures to control fugitive dust (see Air Quality; Section 3.3), which will minimize potential adverse impacts associated with soil erosion caused by wind.

In addition, the City requires the implementation of best management practices to minimize impacts associated with storm water flows on the proposed project site. These standard requirements, in the form of a Water Quality Management Plan (City of Banning, 2021), assure that erosion resulting from storm flows are controlled on and off site.

With implementation of measures to control fugitive dust and storm water flows, overall soil erosion impacts associated with the proposed project will be less than significant.

c) No Impact. The proposed project site surface soils are predominantly of older alluvial, lake, playa and terrace deposits (clay, silt, and fine-grained sand) (DOC; Geological Map). The proposed project is not located in an area that has a high susceptibility to liquefaction (DOC; Liquefaction) as described in 3.3. a) iii. due to the underlying soils (Qoa; Older Alluvium) onsite and the depth to groundwater in the vicinity of the project site. Additionally, as described in 3.3 a) iv, the proposed project is not located within a landslide hazard area (DOC; Landslide Inventory). The project site consists of, and is surrounded by, primarily flat terrain vegetated with grasses and no impacts associated with landslides are anticipated. Therefore, there would be no impact to the project site or surrounding area due to the presence of unstable soil that could potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

d) Less Than Significant Impact. Expansive soils typically contain large amounts of clay that expand when water is absorbed and shrink when they dry and the resulting upward pressure induced by the swelling can impact surface structures (Community Development Dept., 2006). As described, the site's underlying soils consist of clay, silt, and fine-grained sand (Ql/Qa; Quaternary alluvium), which are typically consolidated and structurally supportive. However, soil profiles in the area include high variable potential for expansion due to surface

clay materials with the potential for very low to moderately low expansion (Banning GP). To keep impacts at a less than significant level, mitigation measure GEO 1 will be implemented as part of project design.

e) No Impact. The proposed project does not include wastewater or tying into existing infrastructure for the disposal of wastewater. Additionally, the project does not require a septic tank or alternative wastewater disposal system. There will be no impact to or from wastewater disposal systems.

f) Less Than Significant Impact. Significant paleontological resources are sites or geologic deposits containing individual fossils or assemblages of fossils that are unique or unusual, diagnostically or stratigraphically important, and add to the existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally (Caltrans, 2014).

Construction activities could affect existing or unknown paleontological resources present at the proposed project site. In order to determine the possible presence of existing or unrecorded paleontological resources, in accordance with the State of California and other governmental agencies, a paleontological review consistent with the requirements of CEQA and other legislation will be performed.

Should significant paleontological resources be identified during the paleontological review at the project site, mitigation measures will be implemented to ensure a less than significant impact (see GEO1).

Mitigation Measure GEO1 would reduce the impact of construction activities on potentially unknown paleontological resources to a less-than-significant level by addressing discovery of unanticipated buried resources and preserving and/or recording those resources consistent with appropriate laws and requirements.

Mitigation Measures

GEO1 In the event that any vertebrate fossils are encountered during construction, all ground disturbing activities within 50 feet of the find shall be temporarily halted, and a qualified paleontologist shall be notified to document the discovery as needed, to evaluate the potential resource, and to assess the nature and significance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they will be properly curated and preserved.

3.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

(Sources: Lindsey, 2020; Executive Office of Governor of California, Edmund G. Brown, 2018)

Setting

Air pollution is a chemical, physical or biological process that modifies the chemistry and other characteristics of the atmosphere. The primary contributor to air pollution is the burning of fossil fuels used in transportation, power and heat generation, and industrial processes. The byproducts from the combustion of fossil fuels can contain a number of air polluting substances. These emissions are responsible for the poor air quality that is evident in industrial centers worldwide.

The generation of greenhouse gas emissions is produced by both moving and stationary sources, including motor vehicles, the production of electricity and natural gas, and other similar processes. Carbon dioxide is the primary greenhouse gas that has raised the most concern of atmospheric scientists due to current atmospheric levels, current and projected emission levels, and the highly correlated temperature regression curve that has been observed, predicting a future path of rising carbon dioxide levels. As of 2019, the carbon dioxide concentrations in the atmosphere are around 409.8 ppm, hitting a new record high (Lindsey, 2020). Comparatively, prior to the Industrial Revolution in the mid-1700s CO_2 levels were about 280 ppm (Lindsey, 2020), and over the past 650,000 years carbon dioxide levels have fluctuated between 180 and 300 ppm, making present day atmospheric CO_2 levels substantially greater than at any point in the past 650,000 years.

California was the first state to establish regulations that require the reduction of emissions of GHGs from motor vehicles. On September 24, 2004, the California Air Resources Board adopted a bill that requires all motor vehicles of 2009 vintage or later to reduce their greenhouse gas emissions by about 30% by the year 2016. On June 1, 2005, Governor Arnold Schwarzenegger issued executive order S-3-05, which calls for reduction in GHG emission to 1990 levels by 2020 and for an 80 percent reduction below 1990 levels by 2050.

The California Global Warming Solutions Act (AB 32) was adopted by the state legislature in 2006. It sets forth a program to achieve 1990 emission levels by 2020 and requires CARB to proclaim 1990 GHG emissions and develop a Scoping Plan, which sets forth GHG reduction methods. CARB has reported that 1990 GHG emissions totaled 427 million metric tons (MMT) for the state of California; CARB adopted a GHG scoping plan on December 11, 2008. The Scoping Plan includes a cap-and-

trade program, green building strategies, recycling and waste reduction, and Voluntary Early Actions and Reductions. Governor Brown issued Executive Order B-30-15 in April 2015 establishing a new California goal to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 ensuring the state will continue its efforts to reduce carbon pollution. Additionally, Governor Brown issued Executive Order B-55-18 in September 2018 with the goal to achieve carbon neutrality by 2045 (Executive Office of Governor of California, Edmund G. Brown, 2018).

California SB 375 was signed by the Governor in September 2008 and is intended to at least in part implement greenhouse gas reduction targets set forth in AB 32. The bill encourages regional land use planning to reduce vehicle miles traveled and requires jurisdictions to adopt a sustainable communities strategy.

Discussion of Impacts

a, b) The proposed project will produce GHG emissions during construction and operation of the new well site and ancillary facilities. As stated in Section 3.3, Air Quality, the CalEEMod model was utilized to quantify air quality emission projections, which include GHG emissions. The CalEEMod runs are provided for reference as Appendix A. Determinations of significance for construction-related and operational greenhouse gas emissions were based on the comparison of project-generated emissions to applicable SCAQMD thresholds. The SCAQMD currently has one GHG threshold of 10,000 metric tons per year of CO_2e for operation of industrial facilities. SCAQMD does not have a threshold for construction GHG emissions. Because the project includes industrial-type water treatment facilities, project-related operational greenhouse gas emissions were compared to the SCAQMD threshold of 10,000 metric tons per year of CO_2e. The significance of construction-related GHG impacts are also based on the SCAQMD threshold of 10,000 metric tons per year of CO_2e, along with the project's consistency with adopted State and local GHG reduction measures. Further, SCAQMD staff recommends that construction emissions be amortized over a 30-year project lifetime, so that GHG reduction measures would address construction GHG emissions as part of the operational GHG reduction targets (SCAQMD 2008).

Table 3-8 shows construction impacts and Table 3-9 shows operational impacts. All construction related GHG emissions will be temporary and will end once the proposed project construction is completed. The operation of the proposed project will generate minimal continuous greenhouse gases through area source emissions, for instance vehicle trips, energy use at the well site, and potential use of the backup generator under emergency conditions.

Table 3-8: Construction GHG Emissions Summary (Metric Tons/Year)

Construction Activity	CO_2	CH_4	N_2O	CO_2e
Well Drilling and Ancillary Facilities	92.63	0.02	1.09E-03	93.57
Future Cr6 Treatment	29.48	9.01E-03	7.00E-05	29.72
SCAQMD Threshold[1]	10,000			
Significant Impact?	No	No	No	No

[1] Source: South Coast Air Quality Management District Air Quality Significance Thresholds (Revision April 2019)

Table 3-9. Operational GHG Emissions Summary (Metric Tons/Year)

Construction Activity				CO_2e
Well Drilling and Ancillary Facilities	15.84	9.00E-04	1.70E-04	15.91
Future Cr6 Treatment	2.00E-05	0	0	2.00E-05
SCAQMD Threshold[1]	10,000			
Significant Impact?	No	No	No	No

[1] Source: South Coast Air Quality Management District Air Quality Significance Thresholds (Revision April 2019)

All components of construction, including equipment, fuels, materials, and management practices, would be subject to current and future SCAQMD rules and regulations related to greenhouse gases. Applicable SCAQMD rules include, but are not limited to, source specific standards that reduce the greenhouse gas content in engines, architectural coatings, paving/asphalt, and limit equipment idling durations. In addition, total project construction GHG emissions would be well below the adopted SCAQMD operational threshold of 10,000 metric tons of CO_2e per year. Therefore, since construction-related GHG emissions are below established SCAQMD thresholds, this GHG impact would be less than significant.

As shown in Table 3-8 and Table 3-9, operation of the proposed project would not exceed SCAQMD regulation of operational emissions (10,000 metric tons of CO2e per year). Operation would not significantly increase mobile emissions and therefore would not conflict with the reduction goals of SB 375. In addition, the project will not conflict with the goals of executive order S-3-05 because it is not considered a “large emitter” of GHGs (25,000 MT

CO2e/year) requiring cap-and-trade regulation per CARB's regulatory measure to help achieve statewide GHG reduction goals. The proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs. This impact would be less than significant.

Mitigation Measures

None.

3.9 Hazards & Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

(Sources: Community Development Dept., 2006; Phase I Environmental Site Assessment prepared for City of Banning, 2011a; California Department of Toxic Substances Control, 2021).

Setting

The project site is undeveloped with no existing facilities or utilities. It is primarily flat and vegetated with grasses. In the past, the site was used for farming and livestock grading. The project site for Well C-8 is located in the southeast portion of the Atwell development, a 1,543-acre site within the City that will be developed in accordance with the Butterfield Specific Plan, approved in 2015. This will be a mixed-use development and include two schools, one of which is proposed to be located approximately 1,000 feet from Well C-8. A high pressure gas pipeline traverses the planned Atwell development more than 1,000 feet to the north of the project site. As part of the Butterfield Specific Plan project this gas line will be relocated to ensure that the entirety of the pipeline is within paved streets and will be replaced with residential grade pipeline by Southern California Gas Co. per California Public Utilities Commission requirements.

A Phase I Environmental Site Assessment was conducted by Converse Consultants for the Butterfield Specific Plan EIR, which encompasses the area of the project site. The investigation included a historical review consisting of an aerial photographs and map review, building permit review, and historical use review; an Environmental Database Report (EDR) of the Atwell development site and the surrounding area within a 0.25 to 2.0-mile radius; and a review of the California Department of Conservation Division of Oil and Gas Wildcat Map. As part of the Phase I Environmental Site Assessment, Converse Consultants also conducted site reconnaissance to observe potential presence of hazardous materials and interviewed the property owners' representative and Banning Community Development Department. The assessment did not identify evidence of environmental issues related to hazardous materials on the property, which includes the project site.

Operation of the proposed project would include the use of chlorine for disinfection. Chlorine (in the form of sodium hypochlorite) would be stored in a separate building with appropriate storage methods and secondary containment (i.e., a concrete containment basin designed and constructed to maintain 100 percent of the storage tank capacity) to prevent the release of chemicals to the environment. A backup generator would be provided for standby power. Petroleum would be stored onsite to power the generator. It would be contained in accordance with current standards for spill containment. Additional generators and other fuel-burning equipment may be temporarily used on-site to facilitate drilling of the proposed well and construction of associated facilities (i.e., well house, chlorination building, surge tank, and piping).

In the future, when treatment of Cr6 may be necessary to meet evolving water quality regulations, it would take place on-site and would involve either SBA exchange or treatment with stannous chloride. The SBA exchange process uses resin which would require periodic offsite regeneration to remove the accumulated Cr6 from the resin beads. The stannous chloride treatment process involves adding stannous chloride to the water, allowing reaction time, and removing the tin and chromium particles that remain with a filter. For this type of treatment, particles will accumulate and increase pressure on the filters and the filters would need to be replaced. The used filters would be disposed of as a solid waste at an offsite, licensed facility. It is assumed resin regeneration would also take place off-site at a permitted facility.

Construction and operation of the proposed project will comply with all applicable federal, state, and local laws and regulations related to the storage, transport and handling of hazardous wastes. The

following discussion analyzes potential impacts related to hazards and hazardous materials as a result of the proposed project.

Discussion of Impacts

a) **Less Than Significant Impact.** Project construction would involve the use of hazardous materials such as fuels, paints, lubricants, and solvents. To ensure safe handling, storage, use, transport, and disposal of any hazardous materials associated with construction of well site C-8, the Contractor would comply with all applicable laws and regulations to ensure safe handling of hazardous materials. These include regulations of the Occupational Safety and Health Administration (OSHA) and the California Department of Toxic Substances Control. Cal OSHA also enforces a series of hazard communication programs that provide worker safety training and hazard information requirements, for instance, procedures for identifying and labeling hazardous substances and safety plans to protect workers and employees. In addition, the transportation, storage, use, and disposal of construction-related hazardous materials would comply with all regulations, guidelines, and standards contained within Riverside County's Integrated Waste Management Plan and applicable permitting procedures required by all federal, State, and local agencies associated with hazardous materials and waste issues. These standard requirements will ensure that impacts associated with hazardous materials storage, use, transport, and disposal during construction are less than significant.

   Operation of Well C-8 would require the storage of sodium hypochlorite for disinfection and petroleum to power the on-site emergency generator. The sodium hypochlorite would be delivered to the site up to two times per month. The delivery would take place from a tanker truck over a spill containment pad. Any connecting tanks would have level alarms to prevent overfilling of the sodium hypochlorite storage tank. Alternatively, sodium hypochlorite may be delivered in 55-gallon drums. In either case, chemical storage and piping equipment would be constructed in accordance with current standards for spill containment. The sodium hypochlorite would be stored in a 1,500 gallon tank, composed of a material appropriate for storage of the solution. In addition, the storage tank would be located inside a concrete containment basin in the chlorination building; the containment basin would be designed and constructed to maintain 100 percent of the storage tank capacity. The petroleum would also be stored to fully contain any leaks or spills and is anticipated to be less than 1,320 gallons, the storage capacity regulated by the Riverside County Certified Program Agency. In the future, additional chemical storage may be required to facilitate removal of Cr6. It is likely this would be in the form of a resin treatment vessel(s) or stannous chloride. If Cr6 removal is required in the future, chemical deliveries of stannous chloride may be required as well as transportation of spent resin or filters. If strong base anion exchange treatment is employed, the spent resin would not be considered a hazardous material since it would result from an ion exchange treatment process that does not create hazardous materials. The spent resin would be transported to an approved and permitted regeneration facility with appropriate capacity to handle resin regeneration from Well C-8. If a filter(s) is used to remove Cr6 following treatment with stannous chloride, it would be transported to a licensed facility regulated by County, State and federal regulations pertaining to the disposal of these materials to maintain its license. Like the sodium hypochlorite, the stannous chloride storage would comply with

all spill containment requirements. These standard requirements will assure that the impacts associated with the storage, use, transport, and disposal of materials will be less than significant.

b) **Less Than Significant Impact.** Hazardous material-related accidents typically fall into three categories: construction-related spills, contaminated soils or groundwater encountered during excavation, and demolition of structures that may have hazardous building materials such as asbestos. As previously mentioned, construction activities would involve the use of fuels, lubricants, paints, and solvents. The storage, use, and transportation of these materials could potentially increase the accidental release of small quantities of hazardous materials. Since the Contractor will be required to comply with hazardous materials laws and regulations that relate to the transport, use, and disposal of hazardous materials, the impact to the public from construction-related spills will be less than significant.

As previously stated, a Phase I Environmental Site Assessment was conducted by Converse Consultants for the Butterfield Specific Plan, which encompasses the area of the project site. The assessment did not identify evidence of environmental issues related to hazardous materials on the property, which includes the project site. While some properties in the vicinity of the overall Butterfield Specific Plan project site were identified as potential sources of hazardous materials and/or contaminants, it was determined that these nearby properties represent a low risk due to the nature of their contamination and their distance from the project site. Some debris piles were also identified in portions of the Butterfield Specific Plan site. However, visits to the proposed Well C-8 site have confirmed there is not any debris disposed on-site. The location of the high-pressure gas pipeline is far enough away from well site C-8 that it does not pose a risk from accidental disturbance during construction. Therefore, the risk of exposing the public to hazardous materials as a result of excavation is less than significant.

The proposed Project will not require demolition of asbestos-containing buildings.

As discussed above, treatment chemicals and petroleum would be stored onsite to treat water from Well C-8, and allow for uninterrupted operation of the well. The storage, use, transport, and disposal of these chemicals would conform to applicable codes and regulations related to the proper storage and use of hazardous materials. Chemicals would be stored properly including provisions for any necessary secondary containment of chemical tanks and lines. Conformance with these standards would be monitored by the appropriate regulatory agency through facility inspections and annual reporting mechanisms. Facility compliance would reduce potential impacts associated with the routine use, handling, transport, and storage of hazardous materials in connection with the operation Well C-8 to a less than significant level.

c) **Less than Significant Impact**. The proposed project is located within 1,000 feet (one quarter mile) of a proposed school. Since construction of Well C-8 is anticipated to occur prior to construction of the school, no impacts associated with the accidental release of hazardous materials would occur during construction. While there would not be air emissions associated with the proposed Project, treatment of well water would require the handling, storage, use, transport, and disposal of hazardous materials – in particular, sodium hypochlorite and

petroleum. In the future additional chemical storage and handling may be required to remove Cr6 from the water. As discussed above, the storage, use, transport, and disposal of these chemicals would be conducted in accordance with all applicable regulations. In addition, proper containment would be in place in the case of an accidental spill. As a result, impacts to the school associated with the storage, use, transport, and disposal of hazardous materials will be less than significant.

d) **No Impact**. As stated in the Butterfield Specific Plan EIR, Converse Consultants conducted a search of environmental records to identify listed hazardous sites within an area that included the proposed project site and a 0.25 to 2.0-mile radius. Either no information is on file for the project site and/or there are not reasonably ascertainable files due to a lack of property addresses. In addition, Converse Consultants found that the Project Site was not identified on the Environmental Database Report of Standard Environmental Record Source (EDR). Therefore, no impact will occur.

e) **No Impact**. Well Site C-8 is not located within an airport land use plan or two miles of a public airport or public use airport. No impact would occur.

f) **No Impact**. Construction of well site C-8 would not physically interfere with an adopted emergency response plan since the proposed project will not result in street closures or detours. Existing streets will not be modified to construct or operate Well C-8. A new access road may be added until roadways constructed as part of the Butterfield Specific Plan are in-place, but this roadway would be from the existing roadway network and would only serve the well site. No impact would occur.

a) **Less than Significant Impact**. As discussed in Section 3.20, Wildfire, the project site is located within the Western Riverside County's Local Responsibility Area (LRA) and is designated as a non- Very High Fire Hazard Severity Zone (VHFHSZ) (Office of the State Fire Marshal, 2009). The proposed project would construct a groundwater well and supporting facilities, including a generator, access driveway, and connections to existing storm sewer lines, a water supply transmission main and power lines. However, installation and maintenance of this proposed infrastructure would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. Operation activities at the proposed site would include periodic chemical deliveries and weekly visits by City staff to ensure that the automated system is properly operating. In the future, if Cr6 treatment is required, operational activities may expand to include additional deliveries and removal of solid waste. As discussed, solid waste storage, use, transport, and disposal would be conducted in accordance with all applicable regulations and laws. Therefore, the proposed project would not exacerbate wildfire risks nor expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire.

Mitigation Measures

None.

3.10 Hydrology/Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) result in a substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

(Sources: City of Banning, 2021c, Hazen, 2020)

Setting

The City provides domestic water to its population within the City limits, and small unincorporated area of Riverside County, covering a service area of approximately 26.4 square miles. In alignment with its Urban Water Master Plan, the City ensures a sufficient and reliable water supply for development projects and domestic use within its service area. The primary source of drinking water is groundwater extracted from 19 drinking groundwater wells and one non-potable groundwater well located over the Beaumont, Banning, Banning Water Canyon, Banning Bench, and Cabazon basin storage units. Additionally, the City may receive water supplies from three wells jointly operated by Beaumont Cherry Valley Water Authority and the City. In addition to local groundwater sources, the City also has the flexibility to import water from the State Water Project through the San Gorgonio Pass Water Agency to meet water demand. The City also relies on surface water and treated wastewater supplies to recharge local groundwater basins. Storage consists of nine reservoirs with a

combined storage capacity of 19.55 million gallons. In addition, the City maintains and operates two booster stations, and six Pressure Reducing Valve Stations throughout its service area.

Groundwater extraction is recorded monthly and reported annually to the Department of Water Resources (DWR). From 2015 to 2020, groundwater extraction has averaged 7,513 acre-feet per year. From 2010 to 2015, groundwater extraction averaged 8,246 acre-feet per year. Currently, the City does not utilize the entire capacity of its storage units; the maximum annual amount pumped by the City in the past 10 years is less than 9,000 acre-feet. In anticipation of planned developments, the City expects pumping to increase by over 25% within 10 years (to approximately 11,751 acre-feet) and over 50% (to approximately 13,467 acre-feet) by 2045. In anticipation of increasing long-term water supply demands, the City must establish new wells within its existing groundwater supply subbasins. The City also intends to begin using recycled water within the next ten years and continue to benefit from regional conservation efforts to augment supply and improve reservoir storage capacities.

Within the Beaumont basin, the City currently withdraws 8,050 gpm from its four existing wells and three wells it jointly operates with the Beaumont-Cherry Valley Water District. The proposed project would withdraw water from the Beaumont basin at a pumping rate of up to 1,500 gpm. With the proposed project, the City's pumping capacity to extract water from the Beaumont basin would increase to 9,550 gpm.

The Beaumont Basin is an adjudicated basin pursuant to the *Stipulation for Entry of Judgement Adjudicating Groundwater Rights in the Beaumont Basin*[6]. Pursuant to the judgement, the Court appointed a five-member Watermaster Committee comprised of members from each of the five agencies, including the Cities of Banning and Beaumont, Beaumont-Cherry Valley Water District, South Mesa Water Company, and Yucaipa Valley Water District. The safe yield of the Beaumont basin was determined to be 6,700 acre-feet per year based on the 2013 *Reevaluation of the Beaumont Basin Safe Yield* dated April 3, 2015. On an annual basis, the Watermaster Committee determines the amount of groundwater to which each producer is entitled from the Beaumont Basin without incurring a replenishment obligation.

The project area is subject to City requirements relating to flood control. The City implements standard requirements for the retention of storm flows, and participates in the National Pollutant Discharge Elimination System (NPDES) to protect surface waters from pollution. Development projects must retain the 100-year storm flow on site. As the project site is currently undeveloped, no stormwater management is currently provided at the site. Runoff flows from northwest to southeast via sheet flow to Thompson Avenue to the south of the site.

Discussion of Impacts

a) **Less than Significant.** The project includes construction and operation of a groundwater well and on-site treatment system. The City is required to comply with all Regional Water Quality

[6] When water users within a basin are in dispute over legal rights to the water, a court can issue a ruling known as an adjudication. Adjudications can cover an entire basin, a portion of a basin, or a group of basins and all non-basin locations between. The court decree will define the area of adjudication. The court typically appoints a watermaster to administer the court's decree.

Board standards for the protection of water quality, including preparation of a site-specific Water Quality Management Plan to reduce discharges of waste. Any effluent associated with Cr6 treatment that may be required in the future will be transported to and processed at an approved facility. Further, the City is required to meet water quality requirements in its production and delivery of domestic water; therefore, the proposed water treatment will help to meet water quality requirements set by the state. The proposed project is a water supply and treatment project that would improve water quality. In addition, Cr6 treatment may be pursued, further improving water quality in anticipation of future water quality regulations.

The project will also be required to comply with NPDES regulations, which minimize the pollutant load associated with urban runoff. Construction related discharges would be legally disposed of at a designated discharge point by means of temporary above-ground piping and treated prior to discharge in accordance with SWRCB requirements covered under the General Permit for Construction Discharges. Discharges may be directed to a flood control channel located along Highland Home Road, east of the project site; discharging to this channel would require coordination with and approval by the Riverside County Flood Control and Water Conservation District (RCFCWCD). In addition, the City will comply with all local, State, and federal regulations and standards as they relate to the release of chemicals associated with water treatment, including sampling and reporting, if necessary.

The imposition of local, state and federal standard requirements and the requirements of law will assure that impacts associated with water quality standards are less than significant. Therefore, the project would not violate any groundwater or surface water quality standards.

b, e) **Less than Significant Impact.** The proposed well site would be located within the Beaumont storage unit within the San Gorgonio Pass subbasin of the Coachella Groundwater Basin. Currently, the City does not utilize the entire capacity of all its storage units. As noted above, the maximum annual amount pumped by the City in the past 10 years is approximately 9,000 acre feet per year. The City anticipates pumping rates to increase by 25% within 10 years and over 50% by 2045 to meet projected water supply demand. Therefore, the proposed project to drill and operate a new well within the Beaumont storage unit would allow the City to meet projected demands.

The project would result in construction and operation of a well that would extract groundwater from the Beaumont Basin. **Table 3-10** shows the City's projected water supply, demand, and available supply capacity. The projections in **Table 3-10** include consideration of the City's intent to locate and drill new wells to meet water demands under built-out conditions. As shown in this table, the City has adequate supply, including within the Beaumont Basin, available to support the operation of proposed Well C-8.

Table 3-10. City Projected Water Supply Availability and Demand (Normal Year)[1]

Year	2025	2030	2035	2040	2045
Population					
Water Service Area Population	38,180	45,235	52,290	59,345	66,400
Consumption Rate (GPCD) ***Including 1% Annual Passive Savings***	222	211	201	191	181
Supply					
Groundwater Pumped (Total) **(acre-ft/year)**	8,508	8,574	8,595	8,542	8,476
Pumped from Beaumont Basin Storage Account [2] **(acre-ft/year)**	999	2,126	3,156	4,128	4,991
Total Anticipated Use of Supplies (Estimated Production) [3]	9,507	10,700	11,751	12,670	13,467
Total Available Supply [4] **(acre-ft/year)**	56,358	52,388	44,066	33,124	21,098
Demand					
Total Estimated Demand [5]	9,507	10,701	11,751	12,670	13,467
Compare to Average Demand for Previous 10 years **(7,985 acre-ft/year)**	119%	134%	147%	159%	169%
Supply/Demand Comparison					
Supply-Demand (Difference)	0	0	0	0	0
Available Remaining Supply Capacity **(acre-ft/year)**	46,851	41,687	32,315	20,454	7,631

Notes:

1. The data compiled in these Tables reflects the data presented in the standard DWR Data Table 6.9.
2. The Beaumont Basin Storage Account currently (at end of 2020) contains approximately 50,916 AF of groundwater.
3. Total Anticipated Use of Supplies = [Groundwater Pumped] + [Pumped from Beaumont Storage Account]. This represents the total supply pumped from the Total Available Supply.
4. Total Available Supply = [Safe Yield for each Basin (Beaumont Basin's reasonably available volume for that year; Cabazon Basin's maximum reasonably available volume, which takes place in 2045) + Beaumont Basin Storage Account]. a. Imported water purchased from SGPWA is recharged into the Beaumont Basin, and will be credited to the City in their storage account, allowing for the Reasonably Available Volume to increase. The projections for Imported water purchased is based on the City's recent purchases from SGPWA: i. Low of 250 AF in 2025 ii. High of 2,500 AF in 2045.
5. Total Demand = Consumption Rate x Population. a. Average consumption rate of last 10 years = 234 gallons per capita per day. b. Consumption rate in 2001: 363 gpcd. c. Consumption rate in 2020: 247 gpcd. d. Approximate "passive" savings over past 20 years: 6 gpcd per year. e. Projected "passive" savings: 1 gpcd per year = 181 gpcd by 2045.

In addition, groundwater production from the Beaumont Basin is overseen by the Watermaster Committee on an annual basis to optimize and enhance local water supplies, protect high quality water resources, and implement a comprehensive regional water management program. The City is committed to its participation as a member of the Watermaster Committee and would operate proposed Well C-8 and other wells within Beaumont Basin to pump quantities to which the City is entitled. Therefore, the City would operate the proposed project such that it does not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impeded sustainable groundwater management of the basin.

c, i-iv) **Less than Significant Impact**. The project site is generally flat and contains no rivers or streams. Development at the project site would include a well within a wellhouse, chlorination building, surge tank, piping, and access improvements. While this development would increase impervious area at the site, stormwater management including grading and installation of inlets and a drainage swale is proposed at the site to manage the 100-year storm onsite and meet all City requirements as they relate to stormwater retention. Implementation of the project, including any drainage improvements, would assure that any stormwater runoff would not create or contribute water which would exceed the capacity of capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

d) **No Impact**. The project is not located in a flood hazard, tsunami, or seiche zones, nor risk release of pollutants due to project inundation.

Mitigation Measures

None.

3.11 Land Use / Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

(Sources: City of Banning, 2006; City of Banning, 2011)

Setting

The City's General Plan and Zoning Code and the Butterfield Specific Plan govern the land use of the project site. The Project's Zoning is the same as the City of Banning General Plan land use designation of Low Density Residential (0-5 dwelling units per acre) (City of Banning, 2006). However, the area is also subject to the Butterfield Specific Plan, approved in 2015. The Butterfield Specific Plan guides the planning and development of a 1,543-acre site within the City. The Specific Plan was prepared in conformance with the City's General Plan and Zoning Code and provides an overall land use concept and defines the development regulations, requirements, and design guidelines for the development of the land uses within the plan. According to the Butterfield Specific Plan, the Project is located within Planning Area 28, designated as Open Space – Parks, and surrounded by Medium and Low Density Residential (City of Banning, 2011).

Discussion of Impacts

a) **No Impact**. The proposed project is located on the northern edge of an established community, across the street from residential homes. There is no development directly east, west, or north of the project site. Therefore, the proposed project will not divide an established community. In addition, the project site would be located at the southern boundary of the planned Atwell development; and would not divide the planned community.

b) **Less than Significant Impact**. The proposed project is located within Planning Area 28, which is designated as an Open Space – Park as part of the Butterfield Specific Plan. Under the Specific Plan, this 0.51-acre parcel would be one of multiple mini parks, neighborhood parks and community parks totaling approximately 78.4 acres of parks planned for the Atwell development. While infrastructure/utility projects such as the proposed project are a permitted use within this zone, construction of the project would displace the neighborhood park planned as part of the Atwell community.

   In accordance with the Quimby Act, within the Subdivision Map Act, the Atwell development requires three acres of parks for every 1,000 residents. A total of 13,225

residents are anticipated to reside in the planned community upon completion[7]. In order to meet the requirements of the Quimby Act, the Atwell development must provide at least 39 acres of parks. The proposed project would displace 0.51 acres of planned park space for infrastructure/utility use and reduce the total planned parks area by 0.65 percent to 77.8 acres, well above the minimum requirement. Moreover, the Atwell development includes additional recreational areas (e.g., golf course), as well as natural and landscaped areas for a total area of 428.3 acres devoted to open space. The proposed project is consistent with all other land-use related goals and policies as discussed in the Butterfield Specific Plan.

Mitigation Measures

None.

[7] The Atwell development is allowed to construct up to 4,862 units. The current average household in Banning is 2.72 persons. Therefore, the anticipated population of the planned community is 13,225.

3.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

(Sources: City of Banning, 2018; California Division of Mines and Geology, 1987)

Setting

According to the City of Banning Integrated Master Plan, sand and gravel are the primary mineral resources within the City and are being developed in the eastern portion of Banning. The proposed well site is located in an area designated as MRZ-3, defined as an area containing mineral deposits, the significance of which cannot be evaluated from available data. The proposed Project will have no impacts on Mineral Resources and is discussed further below.

Discussion of Impacts

a) **No Impact**. The well site is located within an area planned for development as part of the Butterfield Specific Plan. The well site would require construction on a small parcel within the 1,543 acres already planned for development and approved by the City and is not designated for mineral resource land uses. The well site is located in an MRZ-3 zone where the significance of mineral resources cannot be evaluated from available data. Therefore, there would be no impact to the availability of a known mineral resource.

b) **No Impact.** There are no locally important mineral resource recovery sites located on a City or Specific Plan within the vicinity of the project site. No impact would occur.

Mitigation Measures

None.

3.13 Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

(Source: USDOT, 2006)

Setting

The project area would be located at an undeveloped site in a primarily residential area. The closest sensitive receptors are residences adjacent to the proposed well site. The proposed project would construct a well which will ultimately be enclosed within a well house, chlorination building, and install a surge tank, backup generator and conveyance piping at the project site.

As part of the development of the noise analysis in the Butterfield Specific Plan EIR, noise level measurements were collected at five sites. One of these sites (the western terminus of Gilman Street) is located within 800 feet of the project site and is representative of typical existing noise exposure within and immediately adjacent to the project site. Ambient noise measurements at this location were recorded at 48.7 decibels (dBA).

The City restricts noise affecting residential uses (City Ordinance #1138; Sec. 11D-05. Base ambient noise level) such that during any 15-minute period, daytime noise levels shall not exceed 60 dBA, and nighttime levels shall not exceed 50 dBA. Exterior noise levels shall not exceed 75 dBA at any time (City Ordinance #1138; Sec. 11D-08. Maximum nonresidential noise levels). Loud, unusual, and unnecessary noises are also prohibited, including equipment causing noise increases of more than 5 dBA over the ambient and back-up beepers that exceed 75 dBA.

Construction activities may exceed the limits of the City noise ordinance between the hours of 7:00 am and 6:00 pm provided that it does not at any time cause noise greater than 55 dBA for an interval of more than 15 minutes when measured in the interior of the nearest residence or school (Sec11D-09. Noises prohibited; unnecessary noise standard). The City Building Inspector may permit construction outside of these daytime hours if the official determines that public health and safety would not be impaired by the construction noise. Operation of the well would produce minimal noise; the well itself would be enclosed within the wellhouse minimizing any noise associated with pumping.

Discussion of Impacts

a) **Less than Significant Impact With Mitigation Incorporated.** The project site is located on an undeveloped parcel adjacent to a residential land use. The main noise source at the project site is vehicular traffic on adjacent and nearby roadways (e.g., West Wilson Street, Highland Home Road). Ambient noise levels at a location representative of the project site are 48.7 dBA Leq. The vicinity of the project site.

Construction of the proposed project would include drilling of the groundwater well, construction of the well house and chlorination building, and installation of supporting facilities including the surge tank, generator, conveyance piping and paved access. Temporary noise mitigating sound panels would be used during drilling to ensure that potential noise impacts to adjacent sensitive noise receptors (i.e., residential homes) are minimized. With the exception of the temporary six-week period of 24-hours a day, seven days a week work to drill the well, construction activities associated with construction of the ancillary facilities would adhere to the City's authorized work hours. As shown in Table 3-11, some construction equipment is anticipated to exceed established noise standards for limited durations. The City's noise ordinance provides that projects undertaken for public health and safety, such as this water project, are exempt from the ordinance's time limits. However, mitigation measures (see NOI1) would be implemented to minimize impacts from construction noise to the greatest extent practicable.

Table 3-11. Typical Maximum Construction Noise Levels (dBA)

Construction Activity	Equipment	Noise at 100' (dBA)
Well Drilling	Drill rig, water truck, dump truck	81[8]
Grading, Clearing	Grader, rubber-tired dozer, water truck, backhoe, dump/hauling truck	79
Utilities	Rubber-tired dozer, water truck, backhoe, dump/hauling truck	74
Building Exterior	Crane, hand/power tools, paint sprayer	79
Building Interior	Hand/power Tools, paint sprayer	74
Hardscape and Landscape	Backhoe, compactor, dump/hauling truck, cement / mortar mixer	68

Primary operation-related noise sources will include vehicular traffic accessing the site, well pump and surge tank activity, and emergency backup generators. The vehicle mix will be comparable with existing vehicles on surrounding roads. If Cr6 treatment is implemented in the future, larger vehicles may be required periodically to haul and dispose of spent media. Noise generated by operation of the proposed project is consistent with noise levels at any utility/institutional development and will not exceed City standards. The proposed project is compatible with surrounding land uses and operational noise impacts are not expected to exceed existing noise levels currently being generated in the vicinity of the project site.

[8] Behrens and Associates, Inc., 2006.

b) **Less than Significant Impact**. Use of heavy equipment during construction could generate vibration levels . The property boundary of the residential homes closest to the well site is approximately 50 feet from the proposed well location. As shown in Table 3-12, vibration levels for are not expected to exceed the human perception threshold. While vibration is not expected to generate significant impacts, the best practices (such as scheduling construction activities with the highest potential to produce vibration to less-sensitive daytime hours) would be implemented to minimize any vibrations.

Table 3-12. Construction Vibration Levels Compared to Human Perception Thresholds (PPV)

Equipment	Peak Particle Velocity (PPV) at 100 ft (in/sec)	Human Perception Thresholds (PPV)
Vibratory Roller	0.046	0.01 to 0.04 for continuous sources; 0.04 to 0.25 for transient sources
Large Bulldozer	0.019	
Drilling	0.019	
Loaded Trucks	0.017	
Small Bulldozer	0.001	

c) **No Impact**. The project is not located within the vicinity of a private airstrip or an airport land use plan or within two miles of a public airport or public use airport.

Mitigation Measures

NOI1. Noise mitigation measures would be implemented to minimize impacts to the greatest extent practicable. These practices would include the following:

- Muffle and maintain all construction equipment powered by internal combustion engines;
- Prohibit unnecessary idling of construction vehicles and equipment;
- Locate all stationary noise-generating construction equipment such as compressors or generators far from existing residences;
- Select quiet construction equipment where practicable; and
- The City shall designate a noise-disturbance coordinator responsible for responding to local complaints about construction noise. The disturbance coordinator shall determine the cause of any noise complaint and shall require that reasonable measures be implemented to correct the problem. Contact information for the disturbance coordinator shall be posted at the construction site.

3.14 Population / Housing

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

(Source: City of Banning, 2018; US Census Bureau, 2019)

Setting

As of 2019, the City had an estimated population of approximately 31,000 with an average household size of 2.72 persons. The majority of the residential development north of Interstate 10, where the proposed well site is located, is comprised of single-family residential land uses. Multi-family residential development is also present along Wilson Street west of the proposed project site. As discussed, the project site is located in the southeastern portion of the Atwell development which will include single and multi-family homes, in addition to planned open spaces, commercial development, and public buildings. The City of Banning Urban Water Master Plan projects that future water demands within the City will increase from approximately 9,507 acre-feet per year (afy) in 2025 to 13,467 afy by 2045. The proposed Project is an infrastructure project that will address the projected future demands in anticipation of changes to the drinking water Cr6 MCL. It will not result in an increase in population or need for housing.

Discussion of Impacts

a) **No Impact**. Once operational, it is anticipated current staff from the City would routinely visit the project site to ensure proper operation of the well and ancillary equipment. The proposed project would require the installation of a new access to the site but otherwise would not extend new roads. The project site is located within an area of planned development that was previously evaluated in accordance with CEQA. The proposed project would not trigger additional growth and would not result in a substantial increase in the local population.

   The proposed project would allow the City to continue to supply water to its customers and respond to potential changes in water treatment needed to remove Cr6.

   As a result, the project would not induce unplanned population growth, either directly or indirectly.

b) **No Impact**. Neither construction nor operation of the proposed project would displace housing units or people. The project site is not planned to contain housing as part of the

Atwell development. There will not be a need to construct additional housing since construction and operation needs are anticipated to be met by local or existing staff. No impacts will occur.

Mitigation Measures

None.

3.15 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	☐	☒	☐	☒
Fire Protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

(Sources: City of Banning, 2018; City of Banning, 2011a; City of Banning Police Department, 2021; City of Banning Police Department, 2021; City of Banning Parks and Recreation, 2021; Banning Unified School District, 2021; Beaumont Unified School District, 2021)

Setting

Fire Protection: Fire protection services in the City are provided by the Riverside County Fire Department (RCFD) which contracts with the California Department of Forestry (Cal Fire). The City has contracted fire protection with the RCFD since September 1998 and shares services with the cities of Beaumont, Calimesa, and Cabazon as well as adjacent unincorporated areas. This arrangement allows each city to have access to and benefit from the services provided by fire stations located within each other's municipal boundaries. The RCFD is a "full service" department providing not only fire protection, but other services such as paramedic response, hazardous materials response, and full fire prevention support. Currently there is one (1) fire station and two (2) fire engines staffed for emergency response in Banning. The downtown station is located at 172 N. Murray St, approximately 8 minutes from the proposed well site. The second staffed engine is currently housed at 1550 E. 6th Street in Beaumont, approximately 4 mins from the proposed well site. Each engine is staffed with 3 personnel. According to the City's Integrated Master Plan, four additional stations are proposed, including one in the vicinity of the Banning Municipal Airport, a short distance from the project site. Phase 2A of the Butterfield Specific Plan incorporates a dedicated fire station to be located in the northern portion of the development to ensure City response time standards can be met. Once constructed, this station would also serve the project site.

Police Protection: The City of Banning Police Department is located at 125 E. Ramsey Street and provides law enforcement services to the Project Area. Burglaries, thefts and assaults account for the majority of crimes in the City and the most recent data available from the police department show

decreasing crime rates between 2018 and 2019. The Department has staff that support administrative services, recordkeeping, dispatch, code enforcement, detective services and patrol.

Schools: According to the Butterfield Specific Plan EIR, the planned Atwell development, which includes the proposed project site, is served by both the Banning Unified School District and the Beaumont Unified School District. The Banning Unified School District educates approximately 5,000 students enrolled in kindergarten through twelfth grade. The district has four elementary schools, one intermediate school, one middle school, one comprehensive high school, one continuation high school and one independent study school. It is one of the largest employers in the City with approximately 570 employees. The Beaumont Unified School District educates approximately 10,000 students in kindergarten through twelfth grade. The District has seven elementary schools, two middle schools, two high schools, an independent learning school, and adult education programs. The Atwell development will include two new elementary schools within the area of development.

Parks: The City has eight developed parks totaling just under 200 acres. This includes one mini park, four neighborhood parks, one community park, one regional park, and one private park. Public facilities include three picnic shelter areas; three parks with baseball and soccer fields; tennis courts; basketball courts; a new skateboard park; a senior center; and a community center with gymnasium, kitchen area, and meeting rooms. There are sports leagues and on-going classes like yoga and kids cooking in addition to open gym hours and senior activities. The City has also dedicated another 150 plus acres of land for future park development. The development of the Butterfield Specific Plan is expected to address neighborhood park deficiencies in the identified western Gap Area within the City of Banning Integrated Master Plan, including the potential provision of a site for a new Community Center.

Discussion of Impacts

a-e) No Impact. The proposed project is an infrastructure improvement project that would construct a single well to supplement the City's water supply system and includes provisions for potential future treatment related to the removal of Cr6. The well site would be constructed within the larger, planned Atwell development. Construction and operation of the well would not increase the demand for fire, police, school, or park services since the workforce is anticipated to be local or existing. Established service rations for fire, police, school, and park services would not be affected.

There would be a temporary increase in the risk of potential incidents requiring fire or law enforcement services during construction. However, as discussed in Section 3.9, the Contractor would be required to adhere to all federal, state, and local regulations governing the storage, use, transport, and disposal of solid waste. Site security measures would also be in place during construction. The potential increase in incidents would not be expected to exceed the capacity of the local fire and law enforcement agencies.

The project will not generate additional population and will therefore have no impact on schools.

The well site is located on a parcel designated in the Butterfield Specific Plan EIR as Open Space – Park. However, as discussed in Section 3.11, Mitigation Measure LUP1 includes the relocation of this proposed park to another portion of the Specific Plan area. According to the Butterfield Specific Plan EIR, the location of proposed neighborhood parks can be adjusted and remain in substantial conformance with the intent of the Specific Plan. Therefore, the total acreage of parkland within the Atwell development would not be affected by the proposed Project.

Overall, no impact to public services is anticipated.

Mitigation Measures

None.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

(Sources: City of Banning, 2011a; City of Banning, 2011b; City of Banning Parks and Recreation, 2021)

Setting

As discussed in Section 3.15, within the City there are parks, recreational facilities, picnic areas, and community centers. The City of Banning Department of Parks and Recreation provides park and recreational services for the City. The Community Services Department also provides park maintenance. Currently, there are eight developed parks totaling just under 200 acres. The proposed well site is located within the Butterfield Specific Plan area. According to the Butterfield Specific Plan EIR, open space and recreational uses that total approximately 428.8 acres would be included in the planned development.

Discussion of Impacts

a-b) No Impact. The proposed project site would be new water supply infrastructure for the City to help meet increased demand and address potential future water quality regulations. As described in Section 3.14, Well C-8 would not directly or indirectly induce population growth that would increase the demand for recreational facilities. The well site is located on a parcel originally designated in the Atwell development as Open Space – Park. As discussed in Section 3.11, the proposed project would displace 0.51 acres of planned parkland, reducing the total planned park area by 0.65 percent to 77.9 acres. This reduced park area would still exceed the minimum park area as required by the Quimby Act; therefore, the proposed project would not result in increased use of any planned or existing parks or recreational areas. No impact will occur.

Mitigation Measures

None.

3.17 Transportation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

(Sources: City of Banning, 2011a; City of Banning, 2011b)

Setting

The project site is served by collector and arterial streets. Collector and arterial streets are generally low-to-medium speed and low-to-medium capacity roadways that provide connections between neighborhood areas, commercial centers, and regional highways. Access to the project site, including emergency access, is provided via local roadways.

Existing roadways in the vicinity of the project site includes Thompson Avenue, West Gilman Street, Brinton Avenue, Kingswell Avenue, West Hoffers Street and Wilson Street. **Table 3-13** provides a list of existing intersections that would be used to provide access to the project site. The City's acceptable Level of Service (LOS) for both roadway and intersection operations is LOS C or better.

Table 3-13. Intersections in Proximity to the Project Site

Intersection	Classification	Existing Volume/Capacity Ratio	Existing Roadway Capacity LOS (2015)
Highland Home Road and Wilson Street	Arterial / Secondary Collector	0.56 (AM Peak) 0.83 (PM Peak)	C
C St – Apex Avenue and Wilson Street	Secondary Collector	0.72 (AM Peak) 0.78 (PM Peak)	C

Source: Butterfield Specific Plan EIR. The Butterfield Specific Plan did not study intersections immediately surrounding the project sites; therefore, the closest intersections were evaluated for existing conditions.

Discussion of Impacts

e) **Less than Significant Impact.** The proposed project does not represent a land use that generates or attracts substantial vehicle trips and would not be expected to impact the

performance of the existing transportation circulation system. There are no existing or planned bicycle or transit facilities located at or adjacent to the project site. There is an existing sidewalk along Thompson Avenue; however, the existing road terminates at the southern boundary of the project site.

As a result, the project will not conflict with a program, plan, or ordinance or policy addressing the circulation system and would not exceed significant transportation impacts.

(b) **Less than Significant Impact.** CEQA Guidelines Section 10564.3 subdivision (b) stipulates criteria for analyzing transportation impacts in terms of "vehicle miles traveled" for land use projects and transportation projects. VMT refers to the amount and distance of automobile travel attributable to a project.

A limited number of vehicle trips would be generated during construction of the proposed project. The first phase of construction would consist of drilling the well and is anticipated to take up to six months. Traffic generated during this phase of construction (approximately 1 truck trip per day) would be associated with removal of drill cuttings and delivery and removal of equipment over this phase of construction. The second phase of construction would include construction of the wellhead and supporting structures and is anticipated to take up to nine months. Traffic generated during this phase of construction (up to 1 truck trip per day) would be associated with delivery and removal of construction equipment and materials over the nine-month construction period. Larger pieces of equipment would be delivered to the site at the beginning of each construction phase and removed when they are no longer needed. Likewise, construction materials would be delivered to the project site within a limited time when needed, and waste (including spoils) would be removed from the site on an as-needed basis. Trucks would arrive and depart from the site during off-peak hours and would not be of sufficient number to degrade the operating condition of the local roadway network. Installation of distribution piping within the right-of-way would be completed in accordance with a Maintenance and Protection of Traffic Plan to minimize any traffic disruptions. Potential routes for the distribution piping would extend along: (1) Thompson Avenue, West Hoffer Street, and Kingswell Avenue; (2) West Gilman Street, Brinton Avenue, West Hoffer Street, and Kingswell Avenue; or (3) West Gilman Street and Kingswells Avenue.

Operation of the well would be automated with routine visits by City staff, up to once per day. In addition, the site would require periodic chemical deliveries, up to several times a month. Traffic trip generation associated with the operation of the well is anticipated to be less than one trip per day. If stannous chloride is selected to treat Cr6 to meet potential future requirements, maintenance of the filtration equipment would occur as part of regular maintenance activities and no additional trips would be generated. Periodic removal and disposal of the spent filters would be necessary (approximately one truck trip every one to three months, on average). If SBA is chosen to treat Cr6 in the future, resin would require regeneration at an offsite facility. For the transfer and regeneration of resin, one to two trips would be required per month and one trip per day for various deliveries. This nominal increase in traffic during both construction and operation of the proposed project is consistent with use as a utility/infrastructure site, would not interfere with surrounding residential land

use, and would not result in an increase in vehicle miles traveled that would exceed thresholds of significance. The VMT generated during operation of the project would be minimal. Therefore, the project would be consistent with CEQA Guidelines §15064.3, subdivision (b).

c) **No Impact.** The project will be developed in accordance with City design standards and will not create a substantial increase in hazards due to a design feature. The project's access points will be located with adequate sight distances. Project-generated traffic, which is anticipated to be minimal, will be consistent with existing traffic in the area. No project related impact is anticipated.

d) **No Impact**. Emergency access will be provided via Thompson Avenue, West Gilman Street, and West Wilson Street. Regional access to the project site will be provided via major and primary arterials, secondary arterials, and a variety of local roads. Prior to construction, both the Riverside County Fire Department and the Banning Police Department will review the project site plan to ensure safety measures are addressed, including emergency access. The proposed project will not result in inadequate emergency access.

Mitigation Measures

None.

3.18 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision © of Public Resources Code § 5024.1. In applying the criteria set forth in subdivisi©(c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

(Source: City of Banning, 2011a)

Setting

The project site is located in an area known as a history center of Native American settlement, where surveys performed by the U.S. Government Land Office (GLO) in the mid-1850s noted a large number of Native American villages, or rancherias, in the general region. The Takic-speaking Cahuilla are generally divided by anthropologists into three groups, according to their geographic setting: the Pass Cahuilla of the San Gorgonio Pass-Palm Springs area, the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountains and the Cahuilla Valley, and the Desert Cahuilla of the eastern Coachella Valley.

Today, Native Americans of Pass or Desert Cahuilla heritage are mostly affiliated with one or more of the Indian reservations in and near the Coachella Valley, including Cabazon, Augustine, Torres Martinez, Twenty-nine Palms, Agua Caliente, and Morongo.

Discussion of Impacts

a) **Less Than Significant with Mitigation.** In support of the cultural resources assessment conducted for the Butterfield Specific Plan EIR, a field survey and records search was conducted by LSA Associates in March 2006 at the Atwell development, which encompasses the proposed project. As discussed in Section 3.5, Cultural Resources, the records search and field survey did not identify any cultural resources, previously recorded sites, or historic-era properties within the project area. In addition, LSA conducted a consultation with the Native American Heritage Commission (NAHC). The NAHC did not identify any Native American cultural resources that would be impacted by the proposed Atwell development. 33 Native American groups were contacted by LSA. If no reply was received within 15 days of initial

outreach, LSA initiated up to two follow-up phone calls in an effort to contact each group. 18 groups did not respond to the request for Native American Consultation. The Native American groups that responded to the consultation did not identify any known resources. However, three of the Native American Groups who did respond, including the Augustine, Ramona, and Morongo Bands of Mission Indians, all recommended Native American monitoring during site disturbance activities for the planned Atwell development. This outreach effort completed at the time of the EIR were a prudent and comprehensive attempt to contact and consult with Native American groups regarding tribal concerns with development at the site. While AB52 was not mandated at the time this outreach was completed, these efforts satisfy the intent of AB52 as it is currently required and implemented. In addition, the City is currently initiating consultation with local Tribes under the requirements of AB52. The City corresponded with affected Tribes on file with the City.

As described in Section 3.5, Cultural Resources, no archaeological resources were identified on the project site and no such resources are expected. However, mitigation measure CUL1 provides for the presence of a Tribal monitor during ground disturbing activities for the proposed project. The monitor is qualified to identify a resource and recommend how it is to be handled, whether through excavation and curation, or preservation in place, and would make those recommendations if resources are identified. With this mitigation measure in place, the impacts will be less than significant.

Mitigation Measures

See Section 3.5, Cultural Resources (CUL1).

3.19 Utilities / Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

(Sources: City of Banning, 2016; City of Banning, 2021c)

Setting

Domestic Water

The City's public water supply relies on local groundwater sources and imported water from the State Water Project through the San Gorgonio Pass Water Agency (SGPWA) to meet water demand. The City also relies on surface water and treated wastewater supplies to recharge local groundwater basins. Water is extracted from 19 drinking groundwater wells and one non-potable groundwater well located over the Beaumont, Banning, Banning Water Canyon, Banning Bench, and Cabazon basin storage units. Additionally, the City may receive water supplies from three wells jointly operated by Beaumont Cherry Valley Water Authority and the City. Groundwater extraction has averaged 7,513 acre-feet per year from 2015 to 2020. Localized water treatment varies by well site but can include sand separation and disinfection through chemical addition (e.g., liquid hypochlorite treatment system).

The City's distribution system consists of approximately 10,800 service connections and 168 miles of pipeline, averaging 8 inches in diameter. Storage consists of nine reservoirs (storage tanks) with a combined storage capacity of 19.55 million gallons. In addition, the City maintains and operates two booster stations, and 6 Pressure Reducing Valve Stations throughout its service area.

The proposed project includes the construction of one groundwater well at the project site. Project facilities would connect to the existing water transmission line within the public right-of-way and no new infrastructure would be required, other than construction of the well and supporting structures at the project site and installation of new distribution piping within the right-of-way to the existing water transmission line located along West Wilson Street. Transmission of treated water may also be provided via the water transmission stub to be constructed as part of the future Atwell development. In the future, Cr6 treatment may be included on the project site.

Wastewater Provider and Sewer System

Sewer services are provided by the City's Water and Wastewater Utility to approximately 12,000 service connections across a service area of 23 square miles. The City owns and operates a Water Reclamation Facility (WRF), at 2242 East Charles Street in Banning, California. The WRF has a capacity of 3.6 MGD and receives an average daily flow of 2.5 MGD. The wastewater collection system to the Banning WRF includes 115 miles of gravity sewer mains, 5 miles of force mains, and 4 sewer lift stations. Sewer mains range in size from 4 inches to 30 inches in diameter. In vicinity of the project site, an existing 8-inch sewer line extends along Gilman Street, Thompson Avenue and Brinton Avenue to provide service to the adjacent residences. In addition, a sanitary sewer line constructed by Tri Pointe Homes to support the Atwell development would be located within the northern portion of the project site within a blanket drainage easement. The project may include a sewer connection to the existing sewer system in Thompson Avenue or the proposed sewer line stub constructed as part of the Atwell development to support future Cr6 treatment and supporting facilities.

Flood Control

The project site is subject to City requirements relating to flood control. The City implements standard requirements for the retention of storm flows, and participates in the National Pollution Discharge Elimination System (NPDES) to protect surface waters from pollution. Per these regulations, development projects must manage and retain flows from the 100-year storm event on site. As the project site is currently undeveloped, no stormwater management is provided at the site. Runoff flows from northwest to southeast via sheet flow to Thompson Avenue to the south of the site. In addition, a storm sewer line to support the Atwell development would be constructed by Tri Pointe Homes within the northern portion of the site; this line would be located within the blanket drainage easement discussed previously.

Solid Waste Disposal

The City of Banning Public Works Department is responsible for the management of solid waste activities in the City. It contracts with Waste Management Inland Empire (Waste Management IE) for solid waste collection and disposal services. Solid waste is transported to regional landfills, including Badlands, El Sobrante, and Lamb Canyon. Badlands and El Sobrante are owned and operated by the County. El Sobrante is owned and operated by Waste Management IE.

Utilities

The City of Banning's Electric Department, through procurement contracts with the Southern California Public Power Authority, provides electricity services. Existing above-ground power lines extend along the back property line of residences along the eastern edge of Thompson Avenue from the southeastern corner of the project site to Hoffer Street. The proposed project would require upgrades to the existing above-ground power lines to accommodate overhead conductors. Upgrades would include replacement of up to ten utility poles between Hoffer Street and the project site; utility poles would be replaced with either steel or wood poles of similar height. Alternately, underground power distribution could be provided within the public right-of-way along Thompson Avenue, extending from the project site to Hoffer Street. If underground power distribution is required to support the Atwell development, the proposed project would connect to the underground utility to be constructed by the developer.

The Southern California Gas Company provides natural gas services within the project area. The proposed project is not anticipated to require natural gas service.

Discussion of Impacts

b) **Less than Significant Impact**. The project proposes construction of a new groundwater well, and on-site treatment at the project site to meet current and future water treatment requirements and to augment water supply to meet projected water demands within the near future attributed to infill and new developments. To manage stormwater runoff, onsite drain inlets and a new storm drain pipeline to connect to the existing storm drains south of the project site are proposed at the site. A sewer connection may be constructed to support future Cr6 treatment or facilities at the site. Therefore, by its nature and design, the project would result in the construction of new facilities.

   The project would not require modification of the proposed easement or relocation of any of the proposed sewer or storm sewer lines that will support the Atwell development. The proposed project will be responsible for the connections necessary to tie into existing water, power (and potentially sewer) lines to the standards set by the City. Natural gas and telecommunication connections are not anticipated for this project. The project results in new facilities, but these facilities are required to maintain water quality to anticipated State standards and augment supply. The impacts associated with the construction of the project have been identified throughout this document, analyzed, and mitigated to the extent necessary.

c) **Less than Significant Impact**. The project proposes the construction of a new groundwater well to augment water supply and meet anticipated treatment requirements for Cr6 treatment. According to the City's Urban Water Management Plan, the City does not expect to have a water supply shortage through 2045. The City has adequate groundwater supplies available to support projected future development based on the safe yield of the subbasins and the City's storage account. Further, the City's subbasin safe yield and storage account volumes are not expected to be affected during droughts lasting up to five years. Further, any droughts will be

addressed by following the City's Water Shortage Contingency Plan (WSCP) along with implementation of regional contingency plans.

d) **Less than Significant Impact**. The proposed project would not generate any wastewater due to proposed onsite chlorination. In the future, any wastewater associated with future Cr6 treatment processes would be consistent with practices to meet local, regional, state, and federal standards for wastewater treatment and coordination with the City's WRF. While the current rated capacity of the WRF is 3.6 MGD, the City has plans to upgrade the existing plant to meet tertiary treatment standards and facilitate infrastructure to supply recycled water. The design of the upgraded WRF will allow for the expansion of the treatment capacity when it becomes necessary, as described in the 2018 Integrated Master Plan and the City's Recycled Water Master Plan. As such, if future treatment would require wastewater treatment, there would be adequate capacity to serve the project's projected demand in addition to the existing community.

d, e) **Less than Significant Impact**. Operation of the proposed project would generate minimal solid waste. The treatment process of chlorination on site would not generate solid waste. In addition, the well site would be unmanned; therefore, no worker-generated solid waste is anticipated. The only anticipated solid waste would be associated with spent media generated from future on-site Cr6 treatment. While treatment would occur onsite, any spent media or used filters will be disposed of off-site. In addition, future treatment operations could result in generation of solid waste including resin, and liquid and solid waste from an off-site resin regeneration facility. If solid waste is generated in the future, the City would manage the solid waste and disposal consistent with the solid waste disposal practices to meet all local, regional, state, and federal standards for solid waste reduction goals.

Mitigation Measures

None.

3.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

(Sources: CAL FIRE, 2009; CAL FIRE, 2007)

Setting

The California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP) assesses the amount and extent of the State's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. As part of this assessment, CAL FIRE produces maps designating Fire Hazard Severity Zones for State Responsibility Area (SRA) lands and Very High Fire Hazard Severity Zone Maps (VHFHSZ) for Local Responsibility Area (LRA) lands. The project site is located within the Western Riverside County's LRA and is designated as a non-VHFHSZ.

Discussion of Impacts

a) **No Impact**. Construction of the proposed project would include installation of pipelines within the public right-of-way. Potential staging areas would be primarily located at the project site, but some potential staging may temporarily occur within the public right-of-way. Any construction activities would adhere to a Maintenance and Protection of Traffic Plan to ensure that emergency response vehicles or emergency evacuations would not be affected. Operation of the project would not result in any interference with an emergency response plan or emergency evacuation plan.

b) **No Impact**. The proposed project is located within an LRA designated as non-VHFHSZ. Therefore, the proposed project would not exacerbate wildfire risks nor expose project occupants to pollutant concentrations from a wildfire or uncontrolled spread of a wildfire.

c) **Less than Significant Impact.** The proposed project would construct a groundwater well and supporting facilities, including a generator, access driveway, and connections to existing storm sewer lines, a water supply transmission main, and power lines. The proposed project may also construct a sewer line to connect to the existing sewer system in Thompson Avenue. In addition, the project may tie into proposed sewer, power, and water lines to be constructed as part of the proposed Atwell development. However, installation and maintenance of this proposed infrastructure would not exacerbate fire risk or result in temporary or ongoing impacts to the environment. Operation activities at the proposed site would include periodic chemical deliveries and weekly visits by City staff to ensure that the automated system is properly operating. In the future, if Cr6 treatment is pursued, operational activities may expand to include additional deliveries and removal of solid waste. These operational activities would not exacerbate fire risk.

d) **No Impact**. The proposed project would construct a groundwater well and several small above-grade structures. Proposed grading at the site is minimal and the surrounding area is generally flat. Proposed stormwater management measures at the site to maintain existing general drainage patterns would comply with local, regional, and state regulations. The proposed project would not expose people or structures to significant risks as a result of post-fire slope instability or drainage changes.

Mitigation Measures

None.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion of Impacts

a) **Less than Significant Impact with Mitigation Incorporated**.

Biological Resources

The project site is located within the boundaries of the Western Riverside County MSHCP, as discussed in Section 3.4. Mitigation measures BIO1, BIO2, and BIO3 have been included in this Initial Study to complete a MSHCP Consistency analysis and reduce potential impacts to burrowing owls and migratory birds to less than significant levels. The proposed project will not significantly reduce fish or wildlife habitat or otherwise adversely impact a fish or wildlife species.

Cultural Resources

As described in Section 3.5, impacts to cultural resources could be significant, but mitigation measures have been included in consideration of feedback received during consultation with affected Tribes (CUL1). The project will require monitoring of earth moving activities in the unlikely event that buried resources are encountered on the project site. Mitigation measure CUL1 will assure that impacts associated with cultural resources will be reduced to less than significant levels.

Geology/Soils

The paleontological impacts from the proposed project could be significant, if encountered during construction. Mitigation measure GEO1 has been included to ensure that any paleontological resources located during excavation are properly removed and documented to conform to local guidelines. With the proposed mitigation measure GEO1, impacts to geology and soils will be reduced to less than significant levels.

Noise

The noise impacts from construction of the proposed project could result in an impact on the residences immediately adjacent to the project site. Mitigation measure NOI1 includes steps to muffle equipment and vehicles, locate noise-generating equipment far from existing residences, and establishes an ongoing coordinate to address any noise complaints throughout the duration of construction. With this mitigation measure, construction noise impacts are minimized to less than significant levels.

b) **Less than Significant Impact**. The proposed project would result in the construction and operation of a new well site to allow the City to augment its water supply and, if required, meet future treatment requirements. The City has experienced population growth and anticipates further growth; as such, the City must establish new wells within its existing groundwater supply subbasins to support increasing long-term supply demands. Establishing the new C-8 well would advance the City's Urban Water Management Plan to ensure that the City is able to continue delivering reliable domestic water to users within the service area.

Public utility providers will be capable of serving the project with existing and/or planned facilities. The proposed well project is also consistent with past development and infrastructure projects in the vicinity, as described in the City of Banning General Plan, as well as the planned Atwell development, as described in the Butterfield Specific Plan and Butterfield Specific Plan EIR. The incremental effects of the proposed project (inclusive of the mitigation measures discussed in this initial study) when considered along with past projects and the full buildout of the Atwell development, will not result in cumulatively considerable impacts. Potential environmental impacts are expected to remain at, or be mitigated to, levels below significance and long-term environmental goals are not expected to be adversely impacted by the project.

c) **Less than Significant Impact**. The proposed project will result in development of a new groundwater well and treatment facility that will improve water quality and facilitate the City's ability to augment water supply. The project will have a beneficial impact on human beings. Impacts associated with air quality and noise during construction will be mitigated (as set forth in this document) to less than significant levels and will not significantly impact human beings. Therefore, projects related impacts would be less than significant.

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Appendix A.
CalEEMod Output Reports

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Banning Well C-8 Project Run 7a copy

Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	4.00	1000sqft	0.09	2,825.00	0
User Defined Parking	1.00	User Defined Unit	0.15	6,665.00	0
User Defined Recreational	1.00	User Defined Unit	0.27	12,726.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2024
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	610.82	**CH4 Intensity (lb/MWhr)**	0.028	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - City of Banning Electric Utility is not listed. Used EPA CAMX intensity factors (2014)//Mitigation meauresimproved/Removed unused equipment

Land Use - 4 structures. 30% acreage parking is paved. Remainder is labeled recreational

Construction Phase - Project-specific phase start and end dates
Well drilling performed 7 days/week, 24 hours/day
Soil displaced by drilling temporarily piled then removed from site in 2 days
Modify grading to 5 days

Off-road Equipment - Phase-specific equpment/default hours, HP, LF

Off-road Equipment - Default hours/1 HP generator

Off-road Equipment - Project equpment/default hrs/day, HP, load factor

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Default hours/day//Off-highway water truck generally stationary onsite (1hr).

Off-road Equipment - Project-related equipment/defalut HP and LF/Default hr/day

Off-road Equipment - Basic equipment list/Default hours/day, HP, LF / Assumes concrete access road constructed onsite

Off-road Equipment -

Trips and VMT - Workers: Grading:4/Pipeline:5/Construction:5/Paving:5/Coating:2 Assume 2trips/day per worker (in/out)//Haulingl//Well workers=1.25x5=6workers=12 trips

On-road Fugitive Dust - Model calculations based on construction phase/Revised Worker %Pave from 50%default to 99%

Demolition - No demolition in project.

Grading - AP-42 vehicle speed. Area graded from SCAQMD 0.5 acres/hr-day per equipment / 230CY soil removed during drilling to be exported:25'x25' 10'high pile/1600CY imported to resurface site/Soil removal and bulldozing moisture 12%/

Architectural Coating - Rule1113 Non-sacrificial Anti-grafitti Paint

Vehicle Trips - Trip rate based on formula: daily staff (1 worker) site visit and monthly chemical delivery.

Road Dust - Vehicle speed limited to 15mph due to proximity of residential area/99% Area road dust estimate.

Woodstoves - No woodstovers or fireplaces in project.

Consumer Products - No Consumer products onsite

Area Coating - Square footage=2xfootprint

Landscape Equipment - Assume 6 landscaping activities in each of 6 "summer" months

Energy Use - Default

Water And Wastewater - No indoor water appliances onsite

Solid Waste - No solid waste activities onsite

Construction Off-road Equipment Mitigation - Meet future CARB regulation/reduced speed onsite/Surface irrigation 3x day

Area Mitigation - Default values

Energy Mitigation - High efficiency lighting inside and outside structures

Water Mitigation -

Operational Off-Road Equipment - None

Fleet Mix - Assumes daily visit to site by City staff (SUV/LDT1) and monthly chemical delivery by truck (HHD)

Stationary Sources - Emergency Generators and Fire Pumps - 1 diesel emergency generator onsite/default values (75-100HP)

Stationary Sources - Process Boilers - No process boilers in project

Stationary Sources - Emergency Generators and Fire Pumps EF - Default values

Stationary Sources - Process Boilers EF - No boilers

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	7,776.00	1,413.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	23,327.00	4,238.00
tblArchitecturalCoating	ConstArea_Parking	400.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblArchitecturalCoating	EF_Parking	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblAreaCoating	Area_Nonresidential_Exterior	7776	5650
tblAreaCoating	Area_Nonresidential_Interior	23327	5650
tblAreaCoating	Area_Parking	400	0
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	150	50
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 2

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	5.00	11.00
tblConstructionPhase	NumDays	100.00	67.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	5.00	11.00
tblConstructionPhase	NumDays	1.00	2.00
tblConstructionPhase	NumDaysWeek	5.00	7.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	0
tblFleetMix	HHD	0.02	0.04
tblFleetMix	HHD	0.02	0.04
tblFleetMix	HHD	0.02	0.04
tblFleetMix	LDA	0.52	0.00
tblFleetMix	LDA	0.52	0.00
tblFleetMix	LDA	0.52	0.00
tblFleetMix	LDT1	0.06	0.96
tblFleetMix	LDT1	0.06	0.96
tblFleetMix	LDT1	0.06	0.96

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.9730e-003	0.00
tblFleetMix	LHD2	6.9730e-003	0.00
tblFleetMix	LHD2	6.9730e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MDV	0.15	0.00
tblFleetMix	MH	4.0040e-003	0.00
tblFleetMix	MH	4.0040e-003	0.00
tblFleetMix	MH	4.0040e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	8.6400e-004	0.00
tblFleetMix	OBUS	8.6400e-004	0.00
tblFleetMix	OBUS	8.6400e-004	0.00
tblFleetMix	SBUS	9.1400e-004	0.00
tblFleetMix	SBUS	9.1400e-004	0.00
tblFleetMix	SBUS	9.1400e-004	0.00
tblFleetMix	UBUS	2.3400e-004	0.00
tblFleetMix	UBUS	2.3400e-004	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	UBUS	2.3400e-004	0.00
tblGrading	AcresOfGrading	1.00	0.10
tblGrading	MaterialExported	0.00	230.00
tblGrading	MaterialImported	0.00	1,600.00
tblGrading	MeanVehicleSpeed	7.10	3.00
tblGrading	MeanVehicleSpeed	7.10	3.00
tblLandscapeEquipment	NumberSummerDays	180	6
tblLandUse	LandUseSquareFeet	4,000.00	2,825.00
tblLandUse	LandUseSquareFeet	0.00	6,665.00
tblLandUse	LandUseSquareFeet	0.00	12,726.00
tblLandUse	LotAcreage	0.00	0.15
tblLandUse	LotAcreage	0.00	0.27
tblOffRoadEquipment	HorsePower	402.00	210.00
tblOffRoadEquipment	HorsePower	84.00	1.00
tblOffRoadEquipment	LoadFactor	0.20	0.74
tblOffRoadEquipment	LoadFactor	0.74	0.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	4.00	7.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.028
tblProjectCharacteristics	CO2IntensityFactor	0	610.82
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblRoadDust	MaterialMoistureContent	0.5	7.9
tblRoadDust	MeanVehicleSpeed	40	15
tblRoadDust	RoadPercentPave	50	99
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	4.96	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	84.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	100.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	VendorTripNumber	4.00	0.00
tblTripsAndVMT	WorkerTripNumber	13.00	12.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblTripsAndVMT	WorkerTripNumber	9.00	10.00
tblTripsAndVMT	WorkerTripNumber	2.00	4.00
tblVehicleTrips	CC_TL	4.20	0.00
tblVehicleTrips	CC_TL	4.20	0.00
tblVehicleTrips	CC_TL	4.20	0.00
tblVehicleTrips	CC_TTP	28.00	0.00
tblVehicleTrips	CNW_TL	5.40	0.00
tblVehicleTrips	CNW_TL	5.40	0.00
tblVehicleTrips	CNW_TL	5.40	0.00
tblVehicleTrips	CNW_TTP	13.00	0.00
tblVehicleTrips	CW_TL	12.50	0.00
tblVehicleTrips	CW_TL	12.50	0.00
tblVehicleTrips	CW_TL	12.50	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.99	0.73
tblVehicleTrips	SU_TR	5.00	0.73
tblVehicleTrips	WD_TR	4.96	0.73
tblWater	AerobicPercent	87.46	0.00
tblWater	AerobicPercent	87.46	0.00
tblWater	AnaDigestCombDigestGasPercent	100.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblWater	AnaDigestCombDigestGasPercent	100.00	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorForWastewaterTreatment	1,911.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToDistribute	1,272.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToSupply	9,727.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	ElectricityIntensityFactorToTreat	111.00	0.00
tblWater	IndoorWaterUseRate	925,000.00	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	3.0425	28.7129	28.0846	0.0758	12.2867	1.2164	12.8438	3.3273	1.1702	3.8409	0.0000	7,365.2733	7,365.2733	1.4337	0.1908	7,443.1102
2023	1.8877	18.5466	15.6253	0.0291	3.4036	0.9112	4.0410	0.3671	0.8383	1.1688	0.0000	2,825.9011	2,825.9011	0.8719	4.3200e-003	2,848.8547
Maximum	**3.0425**	**28.7129**	**28.0846**	**0.0758**	**12.2867**	**1.2164**	**12.8438**	**3.3273**	**1.1702**	**3.8409**	**0.0000**	**7,365.2733**	**7,365.2733**	**1.4337**	**0.1908**	**7,443.1102**

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					
2022	0.8840	4.5669	37.0654	0.0758	4.2970	0.0364	4.3330	1.3185	0.0355	1.3531	0.0000	7,365.2733	7,365.2733	1.4337	0.1908	7,443.1102
2023	1.3813	1.2916	17.4231	0.0291	1.2152	0.0124	1.2214	0.1483	0.0124	0.1543	0.0000	2,825.9011	2,825.9011	0.8719	4.3200e-003	2,848.8547
Maximum	**1.3813**	**4.5669**	**37.0654**	**0.0758**	**4.2970**	**0.0364**	**4.3330**	**1.3185**	**0.0355**	**1.3531**	**0.0000**	**7,365.2733**	**7,365.2733**	**1.4337**	**0.1908**	**7,443.1102**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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	N20	CO2e
Percent Reduction	**54.05**	**87.60**	**-24.66**	**0.00**	**64.87**	**97.71**	**67.10**	**60.30**	**97.62**	**69.91**	**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	7.2300e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Energy	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4383	29.4383	5.6000e-004	5.4000e-004	29.6132
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
Stationary	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	**9.9300e-003**	**0.0245**	**0.0212**	**1.5000e-004**	**0.0000**	**1.8600e-003**	**1.8600e-003**	**0.0000**	**1.8600e-003**	**1.8600e-003**		**29.4396**	**29.4396**	**5.6000e-004**	**5.4000e-004**	**29.6146**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	lb/day										lb/day					
Area	0.3151	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Energy	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4383	29.4383	5.6000e-004	5.4000e-004	29.6132
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
Stationary	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	**0.3178**	**0.0245**	**0.0212**	**1.5000e-004**	**0.0000**	**1.8600e-003**	**1.8600e-003**	**0.0000**	**1.8600e-003**	**1.8600e-003**		**29.4396**	**29.4396**	**5.6000e-004**	**5.4000e-004**	**29.6146**

	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	N20	CO2e
Percent Reduction	**-3,100.81**	**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	GW Well Drilling	Trenching	3/7/2022	3/15/2022	7	9	Drill GW well
2	Soil Removal	Site Preparation	3/10/2022	3/11/2022	5	2	Removal of drilling soil
3	Grading	Grading	10/17/2022	10/28/2022	5	10	Grading of project site
4	Distribution Pipeline Placement	Trenching	11/1/2022	1/1/2023	5	44	Pipeline extention

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Construction of Ancillary Structures	Building Construction	11/1/2022	2/1/2023	5	67	Support structures
6	Paving	Paving	2/1/2023	2/15/2023	5	11	Site access
7	Architectural Coating	Architectural Coating	2/15/2023	3/1/2023	5	11	Surface and road marking

Acres of Grading (Site Preparation Phase): 0.1

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 0.15

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,238; Non-Residential Outdoor: 1,413; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
GW Well Drilling	Air Compressors	1	24.00	78	0.48
GW Well Drilling	Bore/Drill Rigs	1	24.00	221	0.50
GW Well Drilling	Generator Sets	1	8.00	84	0.74
GW Well Drilling	Pumps	1	8.00	84	0.74
GW Well Drilling	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Soil Removal	Graders	1	8.00	187	0.41
Soil Removal	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Off-Highway Trucks	1	1.00	210	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Distribution Pipeline Placement	Rollers	1	8.00	80	0.38
Distribution Pipeline Placement	Rubber Tired Dozers	1	8.00	247	0.40
Distribution Pipeline Placement	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Construction of Ancillary Structures	Cranes	1	7.00	231	0.29
Construction of Ancillary Structures	Forklifts	1	8.00	89	0.74
Construction of Ancillary Structures	Generator Sets	1	8.00	1	0.80

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction of Ancillary Structures	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Rollers	1	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	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
GW Well Drilling	5	12.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Soil Removal	2	5.00	0.00	29.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	8.00	0.00	200.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Distribution Pipeline Placement	3	8.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Construction of Ancillary Structures	4	10.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	4.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 GW Well Drilling - 2022

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	2.3371	20.0059	23.0235	0.0565		0.9378	0.9378		0.9132	0.9132		5,413.7828	5,413.7828	1.1185		5,441.7455
Total	**2.3371**	**20.0059**	**23.0235**	**0.0565**		**0.9378**	**0.9378**		**0.9132**	**0.9132**		**5,413.7828**	**5,413.7828**	**1.1185**		**5,441.7455**

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	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
Worker	0.0568	0.0306	0.4685	9.6000e-004	2.0421	5.3000e-004	2.0427	0.2203	4.9000e-004	0.2208		97.7240	97.7240	3.0000e-003	2.8100e-003	98.6369
Total	**0.0568**	**0.0306**	**0.4685**	**9.6000e-004**	**2.0421**	**5.3000e-004**	**2.0427**	**0.2203**	**4.9000e-004**	**0.2208**		**97.7240**	**97.7240**	**3.0000e-003**	**2.8100e-003**	**98.6369**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 GW Well Drilling - 2022

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	0.6392	2.3544	30.6471	0.0565		0.0128	0.0128		0.0128	0.0128	0.0000	5,413.7828	5,413.7828	1.1185		5,441.7455
Total	**0.6392**	**2.3544**	**30.6471**	**0.0565**		**0.0128**	**0.0128**		**0.0128**	**0.0128**	**0.0000**	**5,413.7828**	**5,413.7828**	**1.1185**		**5,441.7455**

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	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
Worker	0.0568	0.0306	0.4685	9.6000e-004	0.7291	5.3000e-004	0.7297	0.0890	4.9000e-004	0.0895		97.7240	97.7240	3.0000e-003	2.8100e-003	98.6369
Total	**0.0568**	**0.0306**	**0.4685**	**9.6000e-004**	**0.7291**	**5.3000e-004**	**0.7297**	**0.0890**	**4.9000e-004**	**0.0895**		**97.7240**	**97.7240**	**3.0000e-003**	**2.8100e-003**	**98.6369**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Soil Removal - 2022

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					0.0324	0.0000	0.0324	4.1300e-003	0.0000	4.1300e-003			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.0324**	**0.2573**	**0.2897**	**4.1300e-003**	**0.2367**	**0.2409**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

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	0.0453	1.7305	0.4377	8.2000e-003	4.5203	0.0205	4.5408	0.4952	0.0196	0.5148		870.5303	870.5303	6.0700e-003	0.1369	911.4905
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
Worker	0.0236	0.0127	0.1952	4.0000e-004	0.8509	2.2000e-004	0.8511	0.0918	2.0000e-004	0.0920		40.7184	40.7184	1.2500e-003	1.1700e-003	41.0987
Total	**0.0689**	**1.7432**	**0.6329**	**8.6000e-003**	**5.3712**	**0.0207**	**5.3919**	**0.5870**	**0.0198**	**0.6068**		**911.2487**	**911.2487**	**7.3200e-003**	**0.1381**	**952.5892**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Soil Removal - 2022

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					0.0107	0.0000	0.0107	1.6100e-003	0.0000	1.6100e-003			0.0000			0.0000
Off-Road	0.1191	0.4387	5.3170	9.7300e-003		2.3800e-003	2.3800e-003		2.3800e-003	2.3800e-003	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.1191**	**0.4387**	**5.3170**	**9.7300e-003**	**0.0107**	**2.3800e-003**	**0.0131**	**1.6100e-003**	**2.3800e-003**	**3.9900e-003**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

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	0.0453	1.7305	0.4377	8.2000e-003	1.6356	0.0205	1.6561	0.2067	0.0196	0.2263		870.5303	870.5303	6.0700e-003	0.1369	911.4905
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
Worker	0.0236	0.0127	0.1952	4.0000e-004	0.3038	2.2000e-004	0.3040	0.0371	2.0000e-004	0.0373		40.7184	40.7184	1.2500e-003	1.1700e-003	41.0987
Total	**0.0689**	**1.7432**	**0.6329**	**8.6000e-003**	**1.9395**	**0.0207**	**1.9602**	**0.2438**	**0.0198**	**0.2636**		**911.2487**	**911.2487**	**7.3200e-003**	**0.1381**	**952.5892**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					4.6904	0.0000	4.6904	2.4975	0.0000	2.4975			0.0000			0.0000
Off-Road	1.1209	12.2893	6.1609	0.0149		0.5285	0.5285		0.4862	0.4862		1,447.4387	1,447.4387	0.4681		1,459.1419
Total	**1.1209**	**12.2893**	**6.1609**	**0.0149**	**4.6904**	**0.5285**	**5.2189**	**2.4975**	**0.4862**	**2.9837**		**1,447.4387**	**1,447.4387**	**0.4681**		**1,459.1419**

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	0.0625	2.3869	0.6037	0.0113	6.2349	0.0283	6.2631	0.6830	0.0270	0.7100		1,200.7315	1,200.7315	8.3700e-003	0.1889	1,257.2283
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
Worker	0.0378	0.0204	0.3123	6.4000e-004	1.3614	3.5000e-004	1.3618	0.1468	3.3000e-004	0.1472		65.1494	65.1494	2.0000e-003	1.8700e-003	65.7579
Total	**0.1003**	**2.4073**	**0.9160**	**0.0120**	**7.5963**	**0.0286**	**7.6249**	**0.8299**	**0.0274**	**0.8572**		**1,265.8808**	**1,265.8808**	**0.0104**	**0.1908**	**1,322.9863**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					1.5549	0.0000	1.5549	0.9740	0.0000	0.9740			0.0000			0.0000
Off-Road	0.1831	0.6742	7.5427	0.0149		7.3200e-003	7.3200e-003		7.3200e-003	7.3200e-003	0.0000	1,447.4387	1,447.4387	0.4681		1,459.1419
Total	**0.1831**	**0.6742**	**7.5427**	**0.0149**	**1.5549**	**7.3200e-003**	**1.5622**	**0.9740**	**7.3200e-003**	**0.9813**	**0.0000**	**1,447.4387**	**1,447.4387**	**0.4681**		**1,459.1419**

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	0.0625	2.3869	0.6037	0.0113	2.2561	0.0283	2.2843	0.2851	0.0270	0.3122		1,200.7315	1,200.7315	8.3700e-003	0.1889	1,257.2283
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
Worker	0.0378	0.0204	0.3123	6.4000e-004	0.4861	3.5000e-004	0.4865	0.0593	3.3000e-004	0.0596		65.1494	65.1494	2.0000e-003	1.8700e-003	65.7579
Total	**0.1003**	**2.4073**	**0.9160**	**0.0120**	**2.7422**	**0.0286**	**2.7708**	**0.3444**	**0.0274**	**0.3718**		**1,265.8808**	**1,265.8808**	**0.0104**	**0.1908**	**1,322.9863**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Distribution Pipeline Placement - 2022

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	1.1681	12.1952	7.6803	0.0143		0.6070	0.6070		0.5584	0.5584		1,382.3781	1,382.3781	0.4471		1,393.5554
Total	**1.1681**	**12.1952**	**7.6803**	**0.0143**		**0.6070**	**0.6070**		**0.5584**	**0.5584**		**1,382.3781**	**1,382.3781**	**0.4471**		**1,393.5554**

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	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
Worker	0.0378	0.0204	0.3123	6.4000e-004	1.3614	3.5000e-004	1.3618	0.1468	3.3000e-004	0.1472		65.1494	65.1494	2.0000e-003	1.8700e-003	65.7579
Total	**0.0378**	**0.0204**	**0.3123**	**6.4000e-004**	**1.3614**	**3.5000e-004**	**1.3618**	**0.1468**	**3.3000e-004**	**0.1472**		**65.1494**	**65.1494**	**2.0000e-003**	**1.8700e-003**	**65.7579**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Distribution Pipeline Placement - 2022

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	0.1747	0.6435	8.1595	0.0143		8.3700e-003	8.3700e-003		8.3700e-003	8.3700e-003	0.0000	1,382.3781	1,382.3781	0.4471		1,393.5554
Total	**0.1747**	**0.6435**	**8.1595**	**0.0143**		**8.3700e-003**	**8.3700e-003**		**8.3700e-003**	**8.3700e-003**	**0.0000**	**1,382.3781**	**1,382.3781**	**0.4471**		**1,393.5554**

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	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
Worker	0.0378	0.0204	0.3123	6.4000e-004	0.4861	3.5000e-004	0.4865	0.0593	3.3000e-004	0.0596		65.1494	65.1494	2.0000e-003	1.8700e-003	65.7579
Total	**0.0378**	**0.0204**	**0.3123**	**6.4000e-004**	**0.4861**	**3.5000e-004**	**0.4865**	**0.0593**	**3.3000e-004**	**0.0596**		**65.1494**	**65.1494**	**2.0000e-003**	**1.8700e-003**	**65.7579**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Distribution Pipeline Placement - 2023

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	0.9897	10.2729	7.1899	0.0143		0.4853	0.4853		0.4465	0.4465		1,382.6849	1,382.6849	0.4472		1,393.8646
Total	**0.9897**	**10.2729**	**7.1899**	**0.0143**		**0.4853**	**0.4853**		**0.4465**	**0.4465**		**1,382.6849**	**1,382.6849**	**0.4472**		**1,393.8646**

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	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
Worker	0.0350	0.0180	0.2854	6.2000e-004	1.3614	3.3000e-004	1.3618	0.1468	3.0000e-004	0.1472		63.4026	63.4026	1.7900e-003	1.7300e-003	63.9618
Total	**0.0350**	**0.0180**	**0.2854**	**6.2000e-004**	**1.3614**	**3.3000e-004**	**1.3618**	**0.1468**	**3.0000e-004**	**0.1472**		**63.4026**	**63.4026**	**1.7900e-003**	**1.7300e-003**	**63.9618**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Distribution Pipeline Placement - 2023

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	0.1747	0.6435	8.1595	0.0143		8.3700e-003	8.3700e-003		8.3700e-003	8.3700e-003	0.0000	1,382.6849	1,382.6849	0.4472		1,393.8646
Total	**0.1747**	**0.6435**	**8.1595**	**0.0143**		**8.3700e-003**	**8.3700e-003**		**8.3700e-003**	**8.3700e-003**	**0.0000**	**1,382.6849**	**1,382.6849**	**0.4472**		**1,393.8646**

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	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
Worker	0.0350	0.0180	0.2854	6.2000e-004	0.4861	3.3000e-004	0.4864	0.0593	3.0000e-004	0.0596		63.4026	63.4026	1.7900e-003	1.7300e-003	63.9618
Total	**0.0350**	**0.0180**	**0.2854**	**6.2000e-004**	**0.4861**	**3.3000e-004**	**0.4864**	**0.0593**	**3.0000e-004**	**0.0596**		**63.4026**	**63.4026**	**1.7900e-003**	**1.7300e-003**	**63.9618**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Construction of Ancillary Structures - 2022

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	0.8908	9.0306	7.8829	0.0134		0.4894	0.4894		0.4503	0.4503		1,300.2747	1,300.2747	0.4205		1,310.7881
Total	**0.8908**	**9.0306**	**7.8829**	**0.0134**		**0.4894**	**0.4894**		**0.4503**	**0.4503**		**1,300.2747**	**1,300.2747**	**0.4205**		**1,310.7881**

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	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
Worker	0.0473	0.0255	0.3904	8.0000e-004	1.7018	4.4000e-004	1.7022	0.1836	4.1000e-004	0.1840		81.4367	81.4367	2.5000e-003	2.3400e-003	82.1974
Total	**0.0473**	**0.0255**	**0.3904**	**8.0000e-004**	**1.7018**	**4.4000e-004**	**1.7022**	**0.1836**	**4.1000e-004**	**0.1840**		**81.4367**	**81.4367**	**2.5000e-003**	**2.3400e-003**	**82.1974**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Construction of Ancillary Structures - 2022

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	0.1650	0.6076	8.6215	0.0134		3.3000e-003	3.3000e-003		3.3000e-003	3.3000e-003	0.0000	1,300.2747	1,300.2747	0.4205		1,310.7881
Total	**0.1650**	**0.6076**	**8.6215**	**0.0134**		**3.3000e-003**	**3.3000e-003**		**3.3000e-003**	**3.3000e-003**	**0.0000**	**1,300.2747**	**1,300.2747**	**0.4205**		**1,310.7881**

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	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
Worker	0.0473	0.0255	0.3904	8.0000e-004	0.6076	4.4000e-004	0.6081	0.0741	4.1000e-004	0.0745		81.4367	81.4367	2.5000e-003	2.3400e-003	82.1974
Total	**0.0473**	**0.0255**	**0.3904**	**8.0000e-004**	**0.6076**	**4.4000e-004**	**0.6081**	**0.0741**	**4.1000e-004**	**0.0745**		**81.4367**	**81.4367**	**2.5000e-003**	**2.3400e-003**	**82.1974**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Construction of Ancillary Structures - 2023

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	0.8193	8.2331	7.7933	0.0134		0.4252	0.4252		0.3912	0.3912		1,300.5603	1,300.5603	0.4206		1,311.0760
Total	**0.8193**	**8.2331**	**7.7933**	**0.0134**		**0.4252**	**0.4252**		**0.3912**	**0.3912**		**1,300.5603**	**1,300.5603**	**0.4206**		**1,311.0760**

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	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
Worker	0.0437	0.0225	0.3568	7.7000e-004	1.7018	4.1000e-004	1.7022	0.1836	3.8000e-004	0.1839		79.2533	79.2533	2.2400e-003	2.1600e-003	79.9523
Total	**0.0437**	**0.0225**	**0.3568**	**7.7000e-004**	**1.7018**	**4.1000e-004**	**1.7022**	**0.1836**	**3.8000e-004**	**0.1839**		**79.2533**	**79.2533**	**2.2400e-003**	**2.1600e-003**	**79.9523**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Construction of Ancillary Structures - 2023

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	0.1650	0.6076	8.6215	0.0134		3.3000e-003	3.3000e-003		3.3000e-003	3.3000e-003	0.0000	1,300.5603	1,300.5603	0.4206		1,311.0760
Total	**0.1650**	**0.6076**	**8.6215**	**0.0134**		**3.3000e-003**	**3.3000e-003**		**3.3000e-003**	**3.3000e-003**	**0.0000**	**1,300.5603**	**1,300.5603**	**0.4206**		**1,311.0760**

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	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
Worker	0.0437	0.0225	0.3568	7.7000e-004	0.6076	4.1000e-004	0.6080	0.0741	3.8000e-004	0.0745		79.2533	79.2533	2.2400e-003	2.1600e-003	79.9523
Total	**0.0437**	**0.0225**	**0.3568**	**7.7000e-004**	**0.6076**	**4.1000e-004**	**0.6080**	**0.0741**	**3.8000e-004**	**0.0745**		**79.2533**	**79.2533**	**2.2400e-003**	**2.1600e-003**	**79.9523**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2023

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	0.4388	4.2216	5.7693	8.6700e-003		0.2115	0.2115		0.1954	0.1954		825.8948	825.8948	0.2588		832.3646
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.4388**	**4.2216**	**5.7693**	**8.6700e-003**		**0.2115**	**0.2115**		**0.1954**	**0.1954**		**825.8948**	**825.8948**	**0.2588**		**832.3646**

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	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
Worker	0.0437	0.0225	0.3568	7.7000e-004	1.7018	4.1000e-004	1.7022	0.1836	3.8000e-004	0.1839		79.2533	79.2533	2.2400e-003	2.1600e-003	79.9523
Total	**0.0437**	**0.0225**	**0.3568**	**7.7000e-004**	**1.7018**	**4.1000e-004**	**1.7022**	**0.1836**	**3.8000e-004**	**0.1839**		**79.2533**	**79.2533**	**2.2400e-003**	**2.1600e-003**	**79.9523**

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2023

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	0.0998	0.3677	6.1557	8.6700e-003		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	825.8948	825.8948	0.2588		832.3646
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0998**	**0.3677**	**6.1557**	**8.6700e-003**		**2.0000e-003**	**2.0000e-003**		**2.0000e-003**	**2.0000e-003**	**0.0000**	**825.8948**	**825.8948**	**0.2588**		**832.3646**

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	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
Worker	0.0437	0.0225	0.3568	7.7000e-004	0.6076	4.1000e-004	0.6080	0.0741	3.8000e-004	0.0745		79.2533	79.2533	2.2400e-003	2.1600e-003	79.9523
Total	**0.0437**	**0.0225**	**0.3568**	**7.7000e-004**	**0.6076**	**4.1000e-004**	**0.6080**	**0.0741**	**3.8000e-004**	**0.0745**		**79.2533**	**79.2533**	**2.2400e-003**	**2.1600e-003**	**79.9523**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Architectural Coating - 2023

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	1.1906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**1.3822**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	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
Worker	0.0175	9.0100e-003	0.1427	3.1000e-004	0.6807	1.7000e-004	0.6809	0.0734	1.5000e-004	0.0736		31.7013	31.7013	9.0000e-004	8.6000e-004	31.9809
Total	**0.0175**	**9.0100e-003**	**0.1427**	**3.1000e-004**	**0.6807**	**1.7000e-004**	**0.6809**	**0.0734**	**1.5000e-004**	**0.0736**		**31.7013**	**31.7013**	**9.0000e-004**	**8.6000e-004**	**31.9809**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.8 Architectural Coating - 2023

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	1.1906					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1095	1.8324	2.9700e-003		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**1.2203**	**0.1095**	**1.8324**	**2.9700e-003**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

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	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
Worker	0.0175	9.0100e-003	0.1427	3.1000e-004	0.2431	1.7000e-004	0.2432	0.0297	1.5000e-004	0.0298		31.7013	31.7013	9.0000e-004	8.6000e-004	31.9809
Total	**0.0175**	**9.0100e-003**	**0.1427**	**3.1000e-004**	**0.2431**	**1.7000e-004**	**0.2432**	**0.0297**	**1.5000e-004**	**0.0298**		**31.7013**	**31.7013**	**9.0000e-004**	**8.6000e-004**	**31.9809**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
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
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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	0.00	0.00	0.00		
User Defined Parking	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0
User Defined Parking	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.000000	0.960000	0.000000	0.000000	0.000000	0.000000	0.000000	0.040000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.000000	0.960000	0.000000	0.000000	0.000000	0.000000	0.000000	0.040000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Recreational	0.000000	0.960000	0.000000	0.000000	0.000000	0.000000	0.000000	0.040000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	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	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4383	29.4383	5.6000e-004	5.4000e-004	29.6132
NaturalGas Unmitigated	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4383	29.4383	5.6000e-004	5.4000e-004	29.6132

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
General Light Industry	250.225	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4383	29.4383	5.6000e-004	5.4000e-004	29.6132
User Defined Parking	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
User Defined Recreational	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		**2.7000e-003**	**0.0245**	**0.0206**	**1.5000e-004**		**1.8600e-003**	**1.8600e-003**		**1.8600e-003**	**1.8600e-003**		**29.4383**	**29.4383**	**5.6000e-004**	**5.4000e-004**	**29.6132**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
General Light Industry	0.250225	2.7000e-003	0.0245	0.0206	1.5000e-004		1.8600e-003	1.8600e-003		1.8600e-003	1.8600e-003		29.4383	29.4383	5.6000e-004	5.4000e-004	29.6132
User Defined Parking	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
User Defined Recreational	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		**2.7000e-003**	**0.0245**	**0.0206**	**1.5000e-004**		**1.8600e-003**	**1.8600e-003**		**1.8600e-003**	**1.8600e-003**		**29.4383**	**29.4383**	**5.6000e-004**	**5.4000e-004**	**29.6132**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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	0.3151	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Unmitigated	7.2300e-003	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003

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	7.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Total	**7.2300e-003**	**1.0000e-005**	**6.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.3100e-003**	**1.3100e-003**	**0.0000**		**1.4000e-003**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

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	7.1700e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.3079					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-005	1.0000e-005	6.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.3100e-003	1.3100e-003	0.0000		1.4000e-003
Total	**0.3151**	**1.0000e-005**	**6.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.3100e-003**	**1.3100e-003**	**0.0000**		**1.4000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Use Water Efficient Irrigation System

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

10.0 Stationary Equipment

Banning Well C-8 Project Run 7a copy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	100	84	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

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					
Emergency Generator - Diesel (75 - 100 HP)	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**

11.0 Vegetation

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy

Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	1000sqft	0.03	1,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2025
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	610.82	**CH4 Intensity (lb/MWhr)**	0.028	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Banning Electric Utility is a not-for-profit publicly-owned for profit retail electrical supplier.
Intensity factors from USEPA GHG Emission Factors (CAMX): CO2= 610.82,CH4=0.002849,N2O=0.00603

Land Use - Land use: Prepare a 30'by40'area(0.0276ac) for SBA or Stannous chloride equipment

Construction Phase - Based on Coachella Typical Well Site CalEEMod. Assumes 1/2 number of days for this smaller project.

Off-road Equipment - Based on Coachella input

Off-road Equipment - Input based on Coachella Typical Well Site equipment list, unit amount, and hrs/day.Updated (default)power,hrs/day,load factors.

Off-road Equipment - C-8 GW Well Site Preparation (Based on Coachella Typical Well Site equipment-rubber-tired rollers eliminated per default recommendation).

Trips and VMT - Based on asphalt estimates for 30x40 site ~ 50 CY for paving (3 16CY haul trips). Assume 3 hauling round trips/day for this.

On-road Fugitive Dust - Based on Coachella

Demolition - No demolition is proposed at the C-8 Well site

Grading - Assumes that area is prepared for 30'x40'base for Cr6 equipment(SBA/stannous chloride)

Architectural Coating - None listed

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Trips - Included in operation of C-8 well (i.e, daily visit to sitei included in C-8 GW well assessment)

Road Dust - Input from Banning C-8 input file.

Woodstoves - None related to project

Consumer Products - None related to project

Area Coating - Assumed no coating needed. "Parking" refers to 30'x40' asphalt area for placement of Cr6 equipment.

Landscape Equipment - None - landscaping activities included in well operation.

Energy Use - Based on Coachella information.

Water And Wastewater - No new water use (per Coachella)

Solid Waste - No solid waste generated (per Coachella)

Land Use Change - Initial acres from completion of C-8 well construction (0.51ac to 0.45ac) then reduction due to 30'x40' asphalt base (0.03ac)=0.42 acres of grassland. Default CO2 accumulation.

Sequestration - None

Construction Off-road Equipment Mitigation - Meet future CARB regulations.Reduced speed onsite.Surface irrigation 3xday (Rule 403).

Mobile Land Use Mitigation - Not applicable.

Area Mitigation - Use low VOC coating when applicable.

Energy Mitigation - No appliances. High efficiencey lighting if used.

Water Mitigation - No water use.

Waste Mitigation - No solid waste generated

Operational Off-Road Equipment - None assumed.

Stationary Sources - Emergency Generators and Fire Pumps - None. C-8 Well site already includes emergency generator onsite.

Stationary Sources - Process Boilers - None

Stationary Sources - User Defined - None

Stationary Sources - Emergency Generators and Fire Pumps EF - None

Stationary Sources - Process Boilers EF - None

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	2.00	25.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	15.00
tblConstructionPhase	PhaseEndDate	1/3/2024	2/23/2024
tblConstructionPhase	PhaseEndDate	1/10/2024	3/8/2024
tblConstructionPhase	PhaseEndDate	1/1/2024	1/19/2024
tblConstructionPhase	PhaseStartDate	1/2/2024	1/22/2024

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseStartDate	1/4/2024	2/26/2024
tblGrading	AcresOfGrading	1.50	0.04
tblGrading	AcresOfGrading	0.50	0.04
tblLandUse	LandUseSquareFeet	1,000.00	1,200.00
tblLandUse	LotAcreage	0.02	0.03
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Paving
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.028
tblProjectCharacteristics	CO2IntensityFactor	0	610.82
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblRoadDust	MeanVehicleSpeed	40	15
tblRoadDust	RoadPercentPave	50	99
tblTripsAndVMT	HaulingTripNumber	6.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	6.00

2.0 Emissions Summary

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

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	tons/yr										MT/yr					
2024	0.0191	0.1939	0.1492	3.4000e-004	0.0421	7.9400e-003	0.0501	6.5500e-003	7.3100e-003	0.0139	0.0000	29.4751	29.4751	9.0100e-003	7.0000e-005	29.7200
Maximum	**0.0191**	**0.1939**	**0.1492**	**3.4000e-004**	**0.0421**	**7.9400e-003**	**0.0501**	**6.5500e-003**	**7.3100e-003**	**0.0139**	**0.0000**	**29.4751**	**29.4751**	**9.0100e-003**	**7.0000e-005**	**29.7200**

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	tons/yr										MT/yr					
2024	5.2300e-003	0.0141	0.1828	3.4000e-004	0.0187	4.5000e-004	0.0192	3.0000e-003	4.2000e-004	3.4200e-003	0.0000	29.4751	29.4751	9.0100e-003	7.0000e-005	29.7200
Maximum	**5.2300e-003**	**0.0141**	**0.1828**	**3.4000e-004**	**0.0187**	**4.5000e-004**	**0.0192**	**3.0000e-003**	**4.2000e-004**	**3.4200e-003**	**0.0000**	**29.4751**	**29.4751**	**9.0100e-003**	**7.0000e-005**	**29.7200**

	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	N20	CO2e
Percent Reduction	**72.56**	**92.74**	**-22.54**	**0.00**	**55.60**	**94.33**	**61.74**	**54.20**	**94.25**	**75.32**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	0.1962	0.0176
		Highest	0.1962	0.0176

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	1.0000e-004	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	2.0000e-005
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	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	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	**1.0000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.0000e-004	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	2.0000e-005
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	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	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	**1.0000e-004**	**0.0000**	**1.0000e-005**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

	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	N20	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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.3 Vegetation

Vegetation

	CO2e
Category	MT
Vegetation Land Change	-0.1293
Total	**-0.1293**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2024	1/19/2024	5	15	
2	Grading	Grading	1/22/2024	2/23/2024	5	25	
3	Paving	Paving	2/26/2024	3/8/2024	5	10	

Acres of Grading (Site Preparation Phase): 0.036

Acres of Grading (Grading Phase): 0.036

Acres of Paving: 0.0276

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

OffRoad Equipment

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

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
Site Preparation	2	5.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	6.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

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					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7400e-003	0.0420	0.0292	7.0000e-005		1.5100e-003	1.5100e-003		1.3900e-003	1.3900e-003	0.0000	6.4111	6.4111	2.0700e-003	0.0000	6.4630
Total	**3.7400e-003**	**0.0420**	**0.0292**	**7.0000e-005**	**2.0000e-005**	**1.5100e-003**	**1.5300e-003**	**0.0000**	**1.3900e-003**	**1.3900e-003**	**0.0000**	**6.4111**	**6.4111**	**2.0700e-003**	**0.0000**	**6.4630**

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	1.2000e-004	8.0000e-005	1.0000e-003	0.0000	6.0500e-003	0.0000	6.0500e-003	6.5000e-004	0.0000	6.6000e-004	0.0000	0.2407	0.2407	1.0000e-005	1.0000e-005	0.2429
Total	**1.2000e-004**	**8.0000e-005**	**1.0000e-003**	**0.0000**	**6.0500e-003**	**0.0000**	**6.0500e-003**	**6.5000e-004**	**0.0000**	**6.6000e-004**	**0.0000**	**0.2407**	**0.2407**	**1.0000e-005**	**1.0000e-005**	**0.2429**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

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					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9000e-004	3.2900e-003	0.0399	7.0000e-005		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	6.4111	6.4111	2.0700e-003	0.0000	6.4630
Total	**8.9000e-004**	**3.2900e-003**	**0.0399**	**7.0000e-005**	**1.0000e-005**	**2.0000e-005**	**3.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**6.4111**	**6.4111**	**2.0700e-003**	**0.0000**	**6.4630**

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	1.2000e-004	8.0000e-005	1.0000e-003	0.0000	2.7700e-003	0.0000	2.7700e-003	3.3000e-004	0.0000	3.3000e-004	0.0000	0.2407	0.2407	1.0000e-005	1.0000e-005	0.2429
Total	**1.2000e-004**	**8.0000e-005**	**1.0000e-003**	**0.0000**	**2.7700e-003**	**0.0000**	**2.7700e-003**	**3.3000e-004**	**0.0000**	**3.3000e-004**	**0.0000**	**0.2407**	**0.2407**	**1.0000e-005**	**1.0000e-005**	**0.2429**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

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					4.5400e-003	0.0000	4.5400e-003	2.4800e-003	0.0000	2.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1216	0.0693	1.8000e-004		5.0000e-003	5.0000e-003		4.6000e-003	4.6000e-003	0.0000	15.4750	15.4750	5.0000e-003	0.0000	15.6001
Total	**0.0114**	**0.1216**	**0.0693**	**1.8000e-004**	**4.5400e-003**	**5.0000e-003**	**9.5400e-003**	**2.4800e-003**	**4.6000e-003**	**7.0800e-003**	**0.0000**	**15.4750**	**15.4750**	**5.0000e-003**	**0.0000**	**15.6001**

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	3.3000e-004	2.0000e-004	2.6600e-003	1.0000e-005	0.0161	0.0000	0.0161	1.7400e-003	0.0000	1.7500e-003	0.0000	0.6419	0.6419	2.0000e-005	2.0000e-005	0.6478
Total	**3.3000e-004**	**2.0000e-004**	**2.6600e-003**	**1.0000e-005**	**0.0161**	**0.0000**	**0.0161**	**1.7400e-003**	**0.0000**	**1.7500e-003**	**0.0000**	**0.6419**	**0.6419**	**2.0000e-005**	**2.0000e-005**	**0.6478**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

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					1.5000e-003	0.0000	1.5000e-003	9.7000e-004	0.0000	9.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1600e-003	7.9400e-003	0.0895	1.8000e-004		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	15.4750	15.4750	5.0000e-003	0.0000	15.6001
Total	**2.1600e-003**	**7.9400e-003**	**0.0895**	**1.8000e-004**	**1.5000e-003**	**4.0000e-005**	**1.5400e-003**	**9.7000e-004**	**4.0000e-005**	**1.0100e-003**	**0.0000**	**15.4750**	**15.4750**	**5.0000e-003**	**0.0000**	**15.6001**

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	3.3000e-004	2.0000e-004	2.6600e-003	1.0000e-005	7.3800e-003	0.0000	7.3800e-003	8.7000e-004	0.0000	8.7000e-004	0.0000	0.6419	0.6419	2.0000e-005	2.0000e-005	0.6478
Total	**3.3000e-004**	**2.0000e-004**	**2.6600e-003**	**1.0000e-005**	**7.3800e-003**	**0.0000**	**7.3800e-003**	**8.7000e-004**	**0.0000**	**8.7000e-004**	**0.0000**	**0.6419**	**0.6419**	**2.0000e-005**	**2.0000e-005**	**0.6478**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

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	3.1100e-003	0.0295	0.0445	7.0000e-005		1.4100e-003	1.4100e-003		1.3100e-003	1.3100e-003	0.0000	5.9740	5.9740	1.8900e-003	0.0000	6.0214
Paving	4.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.1500e-003**	**0.0295**	**0.0445**	**7.0000e-005**		**1.4100e-003**	**1.4100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.9740**	**5.9740**	**1.8900e-003**	**0.0000**	**6.0214**

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	1.0000e-005	3.2000e-004	9.0000e-005	0.0000	8.9000e-004	0.0000	8.9000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.1546	0.1546	0.0000	2.0000e-005	0.1619
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	3.0000e-004	1.8000e-004	2.4000e-003	1.0000e-005	0.0145	0.0000	0.0145	1.5700e-003	0.0000	1.5700e-003	0.0000	0.5777	0.5777	2.0000e-005	2.0000e-005	0.5830
Total	**3.1000e-004**	**5.0000e-004**	**2.4900e-003**	**1.0000e-005**	**0.0154**	**0.0000**	**0.0154**	**1.6700e-003**	**0.0000**	**1.6700e-003**	**0.0000**	**0.7323**	**0.7323**	**2.0000e-005**	**4.0000e-005**	**0.7449**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

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	1.3800e-003	2.0600e-003	0.0474	7.0000e-005		3.7000e-004	3.7000e-004		3.4000e-004	3.4000e-004	0.0000	5.9740	5.9740	1.8900e-003	0.0000	6.0214
Paving	4.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**1.4200e-003**	**2.0600e-003**	**0.0474**	**7.0000e-005**		**3.7000e-004**	**3.7000e-004**		**3.4000e-004**	**3.4000e-004**	**0.0000**	**5.9740**	**5.9740**	**1.8900e-003**	**0.0000**	**6.0214**

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	1.0000e-005	3.2000e-004	9.0000e-005	0.0000	4.1000e-004	0.0000	4.1000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1546	0.1546	0.0000	2.0000e-005	0.1619
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	3.0000e-004	1.8000e-004	2.4000e-003	1.0000e-005	6.6400e-003	0.0000	6.6400e-003	7.8000e-004	0.0000	7.9000e-004	0.0000	0.5777	0.5777	2.0000e-005	2.0000e-005	0.5830
Total	**3.1000e-004**	**5.0000e-004**	**2.4900e-003**	**1.0000e-005**	**7.0500e-003**	**0.0000**	**7.0500e-003**	**8.3000e-004**	**0.0000**	**8.4000e-004**	**0.0000**	**0.7323**	**0.7323**	**2.0000e-005**	**4.0000e-005**	**0.7449**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
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

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	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

	Miles			Trip %			Trip Purpose %		
Land Use	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	12.50	4.20	5.40	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	0.519370	0.060618	0.186312	0.143152	0.024585	0.006910	0.010773	0.020267	0.000881	0.000230	0.022128	0.000902	0.003872

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	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	0.0000

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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	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**

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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	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	1.0000e-004	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	2.0000e-005
Unmitigated	1.0000e-004	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	2.0000e-005

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	3.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.0000e-005					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	2.0000e-005
Total	**1.1000e-004**	**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**	**2.0000e-005**

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6.2 Area by SubCategory

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	3.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	8.0000e-005					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	2.0000e-005
Total	**1.1000e-004**	**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**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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**

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

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-0.1293	0.0000	0.0000	-0.1293

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	0.45 / 0.42	-0.1293	0.0000	0.0000	-0.1293
Total		**-0.1293**	**0.0000**	**0.0000**	**-0.1293**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy

Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.00	1000sqft	0.03	1,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2025
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	610.82	**CH4 Intensity (lb/MWhr)**	0.028	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Banning Electric Utility is a not-for-profit publicly-owned for profit retail electrical supplier.
Intensity factors from USEPA GHG Emission Factors (CAMX): CO2= 610.82,CH4=0.002849,N2O=0.00603

Land Use - Land use: Prepare a 30'by40'area(0.0276ac) for SBA or Stannous chloride equipment

Construction Phase - Based on Coachella Typical Well Site CalEEMod. Assumes 1/2 number of days for this smaller project.

Off-road Equipment - Based on Coachella input

Off-road Equipment - Input based on Coachella Typical Well Site equipment list, unit amount, and hrs/day.Updated (default)power,hrs/day,load factors.

Off-road Equipment - C-8 GW Well Site Preparation (Based on Coachella Typical Well Site equipment-rubber-tired rollers eliminated per default recommendation).

Trips and VMT - Based on asphalt estimates for 30x40 site ~ 50 CY for paving (3 16CY haul trips). Assume 3 hauling round trips/day for this.

On-road Fugitive Dust - Based on Coachella

Demolition - No demolition is proposed at the C-8 Well site

Grading - Assumes that area is prepared for 30'x40'base for Cr6 equipment(SBA/stannous chloride)

Architectural Coating - None listed

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Vehicle Trips - Included in operation of C-8 well (i.e, daily visit to sitei included in C-8 GW well assessment)

Road Dust - Input from Banning C-8 input file.

Woodstoves - None related to project

Consumer Products - None related to project

Area Coating - Assumed no coating needed. "Parking" refers to 30'x40' asphalt area for placement of Cr6 equipment.

Landscape Equipment - None - landscaping activities included in well operation.

Energy Use - Based on Coachella information.

Water And Wastewater - No new water use (per Coachella)

Solid Waste - No solid waste generated (per Coachella)

Land Use Change - Initial acres from completion of C-8 well construction (0.51ac to 0.45ac) then reduction due to 30'x40' asphalt base (0.03ac)=0.42 acres of grassland. Default CO2 accumulation.

Sequestration - None

Construction Off-road Equipment Mitigation - Meet future CARB regulations.Reduced speed onsite.Surface irrigation 3xday (Rule 403).

Mobile Land Use Mitigation - Not applicable.

Area Mitigation - Use low VOC coating when applicable.

Energy Mitigation - No appliances. High efficiencey lighting if used.

Water Mitigation - No water use.

Waste Mitigation - No solid waste generated

Operational Off-Road Equipment - None assumed.

Stationary Sources - Emergency Generators and Fire Pumps - None. C-8 Well site already includes emergency generator onsite.

Stationary Sources - Process Boilers - None

Stationary Sources - User Defined - None

Stationary Sources - Emergency Generators and Fire Pumps EF - None

Stationary Sources - Process Boilers EF - None

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	OxidationCatalyst	0.00	15.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	2.00	25.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	NumDays	1.00	15.00
tblConstructionPhase	PhaseEndDate	1/3/2024	2/23/2024
tblConstructionPhase	PhaseEndDate	1/10/2024	3/8/2024
tblConstructionPhase	PhaseEndDate	1/1/2024	1/19/2024
tblConstructionPhase	PhaseStartDate	1/2/2024	1/22/2024

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseStartDate	1/4/2024	2/26/2024
tblGrading	AcresOfGrading	1.50	0.04
tblGrading	AcresOfGrading	0.50	0.04
tblLandUse	LandUseSquareFeet	1,000.00	1,200.00
tblLandUse	LotAcreage	0.02	0.03
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Paving
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblOnRoadDust	WorkerPercentPave	50.00	99.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.028
tblProjectCharacteristics	CO2IntensityFactor	0	610.82
tblProjectCharacteristics	N2OIntensityFactor	0	0.006
tblRoadDust	MeanVehicleSpeed	40	15
tblRoadDust	RoadPercentPave	50	99
tblTripsAndVMT	HaulingTripNumber	6.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	6.00

2.0 Emissions Summary

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2024	0.9457	9.7458	9.5252	0.0154	3.2503	0.4004	3.5346	0.3509	0.3684	0.7140	0.0000	1,490.7669	1,490.7669	0.4430	8.9700e-003	1,503.9765
Maximum	**0.9457**	**9.7458**	**9.5252**	**0.0154**	**3.2503**	**0.4004**	**3.5346**	**0.3509**	**0.3684**	**0.7140**	**0.0000**	**1,490.7669**	**1,490.7669**	**0.4430**	**8.9700e-003**	**1,503.9765**

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					
2024	0.3586	0.6514	10.0904	0.0154	1.4843	0.0759	1.5602	0.1745	0.0701	0.2445	0.0000	1,490.7669	1,490.7669	0.4430	8.9700e-003	1,503.9765
Maximum	**0.3586**	**0.6514**	**10.0904**	**0.0154**	**1.4843**	**0.0759**	**1.5602**	**0.1745**	**0.0701**	**0.2445**	**0.0000**	**1,490.7669**	**1,490.7669**	**0.4430**	**8.9700e-003**	**1,503.9765**

	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	N20	CO2e
Percent Reduction	**62.08**	**93.32**	**-5.93**	**0.00**	**54.33**	**81.04**	**55.86**	**50.28**	**80.98**	**65.75**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	5.7000e-004	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	0.0000
Total	**5.7000e-004**	**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	5.7000e-004	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	0.0000
Total	**5.7000e-004**	**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**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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	N20	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	Site Preparation	Site Preparation	1/1/2024	1/19/2024	5	15	
2	Grading	Grading	1/22/2024	2/23/2024	5	25	
3	Paving	Paving	2/26/2024	3/8/2024	5	10	

Acres of Grading (Site Preparation Phase): 0.036

Acres of Grading (Grading Phase): 0.036

Acres of Paving: 0.0276

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Pavers	1	7.00	130	0.42

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

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
Site Preparation	2	5.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	6.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

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					2.5500e-003	0.0000	2.5500e-003	2.7000e-004	0.0000	2.7000e-004			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851		942.2742	942.2742	0.3048		949.8930
Total	**0.4985**	**5.6040**	**3.8921**	**9.7300e-003**	**2.5500e-003**	**0.2012**	**0.2038**	**2.7000e-004**	**0.1851**	**0.1854**		**942.2742**	**942.2742**	**0.3048**		**949.8930**

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	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
Worker	0.0203	0.0101	0.1666	3.8000e-004	0.8509	2.0000e-004	0.8511	0.0918	1.8000e-004	0.0920		38.7973	38.7973	1.0200e-003	1.0000e-003	39.1211
Total	**0.0203**	**0.0101**	**0.1666**	**3.8000e-004**	**0.8509**	**2.0000e-004**	**0.8511**	**0.0918**	**1.8000e-004**	**0.0920**		**38.7973**	**38.7973**	**1.0200e-003**	**1.0000e-003**	**39.1211**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

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					8.4000e-004	0.0000	8.4000e-004	1.1000e-004	0.0000	1.1000e-004			0.0000			0.0000
Off-Road	0.1191	0.4387	5.3170	9.7300e-003		2.3800e-003	2.3800e-003		2.3800e-003	2.3800e-003	0.0000	942.2742	942.2742	0.3048		949.8930
Total	**0.1191**	**0.4387**	**5.3170**	**9.7300e-003**	**8.4000e-004**	**2.3800e-003**	**3.2200e-003**	**1.1000e-004**	**2.3800e-003**	**2.4900e-003**	**0.0000**	**942.2742**	**942.2742**	**0.3048**		**949.8930**

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	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
Worker	0.0203	0.0101	0.1666	3.8000e-004	0.3884	2.0000e-004	0.3886	0.0456	1.8000e-004	0.0458		38.7973	38.7973	1.0200e-003	1.0000e-003	39.1211
Total	**0.0203**	**0.0101**	**0.1666**	**3.8000e-004**	**0.3884**	**2.0000e-004**	**0.3886**	**0.0456**	**1.8000e-004**	**0.0458**		**38.7973**	**38.7973**	**1.0200e-003**	**1.0000e-003**	**39.1211**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

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					0.3629	0.0000	0.3629	0.1988	0.0000	0.1988			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681		1,364.6623	1,364.6623	0.4414		1,375.6962
Total	**0.9132**	**9.7297**	**5.5468**	**0.0141**	**0.3629**	**0.4001**	**0.7630**	**0.1988**	**0.3681**	**0.5669**		**1,364.6623**	**1,364.6623**	**0.4414**		**1,375.6962**

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	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
Worker	0.0325	0.0161	0.2665	6.0000e-004	1.3614	3.2000e-004	1.3618	0.1468	2.9000e-004	0.1471		62.0756	62.0756	1.6300e-003	1.6000e-003	62.5938
Total	**0.0325**	**0.0161**	**0.2665**	**6.0000e-004**	**1.3614**	**3.2000e-004**	**1.3618**	**0.1468**	**2.9000e-004**	**0.1471**		**62.0756**	**62.0756**	**1.6300e-003**	**1.6000e-003**	**62.5938**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

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					0.1203	0.0000	0.1203	0.0775	0.0000	0.0775			0.0000			0.0000
Off-Road	0.1725	0.6354	7.1557	0.0141		3.4500e-003	3.4500e-003		3.4500e-003	3.4500e-003	0.0000	1,364.6623	1,364.6623	0.4414		1,375.6962
Total	**0.1725**	**0.6354**	**7.1557**	**0.0141**	**0.1203**	**3.4500e-003**	**0.1237**	**0.0775**	**3.4500e-003**	**0.0810**	**0.0000**	**1,364.6623**	**1,364.6623**	**0.4414**		**1,375.6962**

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	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
Worker	0.0325	0.0161	0.2665	6.0000e-004	0.6214	3.2000e-004	0.6217	0.0729	2.9000e-004	0.0732		62.0756	62.0756	1.6300e-003	1.6000e-003	62.5938
Total	**0.0325**	**0.0161**	**0.2665**	**6.0000e-004**	**0.6214**	**3.2000e-004**	**0.6217**	**0.0729**	**2.9000e-004**	**0.0732**		**62.0756**	**62.0756**	**1.6300e-003**	**1.6000e-003**	**62.5938**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

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	0.6229	5.8974	8.9074	0.0138		0.2829	0.2829		0.2611	0.2611		1,317.0433	1,317.0433	0.4176		1,327.4842
Paving	7.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6302**	**5.8974**	**8.9074**	**0.0138**		**0.2829**	**0.2829**		**0.2611**	**0.2611**		**1,317.0433**	**1,317.0433**	**0.4176**		**1,327.4842**

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	1.4700e-003	0.0597	0.0181	3.2000e-004	0.1871	7.1000e-004	0.1878	0.0205	6.8000e-004	0.0212		34.0536	34.0536	2.5000e-004	5.3600e-003	35.6562
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
Worker	0.0732	0.0362	0.5997	1.3500e-003	3.0632	7.2000e-004	3.0639	0.3304	6.6000e-004	0.3311		139.6701	139.6701	3.6700e-003	3.6100e-003	140.8361
Total	**0.0747**	**0.0959**	**0.6178**	**1.6700e-003**	**3.2503**	**1.4300e-003**	**3.2517**	**0.3509**	**1.3400e-003**	**0.3522**		**173.7237**	**173.7237**	**3.9200e-003**	**8.9700e-003**	**176.4923**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Paving - 2024

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	0.2767	0.4123	9.4726	0.0138		0.0745	0.0745		0.0687	0.0687	0.0000	1,317.0432	1,317.0432	0.4176		1,327.4842
Paving	7.2300e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.2839**	**0.4123**	**9.4726**	**0.0138**		**0.0745**	**0.0745**		**0.0687**	**0.0687**	**0.0000**	**1,317.0432**	**1,317.0432**	**0.4176**		**1,327.4842**

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	1.4700e-003	0.0597	0.0181	3.2000e-004	0.0861	7.1000e-004	0.0869	0.0104	6.8000e-004	0.0111		34.0536	34.0536	2.5000e-004	5.3600e-003	35.6562
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
Worker	0.0732	0.0362	0.5997	1.3500e-003	1.3981	7.2000e-004	1.3988	0.1641	6.6000e-004	0.1647		139.6701	139.6701	3.6700e-003	3.6100e-003	140.8361
Total	**0.0747**	**0.0959**	**0.6178**	**1.6700e-003**	**1.4843**	**1.4300e-003**	**1.4857**	**0.1745**	**1.3400e-003**	**0.1758**		**173.7237**	**173.7237**	**3.9200e-003**	**8.9700e-003**	**176.4923**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
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
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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	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

	Miles			Trip %			Trip Purpose %		
Land Use	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	12.50	4.20	5.40	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	0.519370	0.060618	0.186312	0.143152	0.024585	0.006910	0.010773	0.020267	0.000881	0.000230	0.022128	0.000902	0.003872

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	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**

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

Use Low VOC Paint - Non-Residential Interior

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	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	5.7000e-004	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	5.7000e-004	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	1.4000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3000e-004					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	**5.8000e-004**	**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**

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

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	1.4000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.3000e-004					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	**5.8000e-004**	**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

Banning C-8 Well Project Cr6 Treatment Run 1a 081821 EMFAC 0 Energy - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation