February 13, 2023

Julia Descoteaux, Senior Planner
City of Moreno Valley
14177 Frederick Street
PO Box 88005
Moreno Valley, CA 92552

Subject: **EMWD Comments for the Cottonwood and Edgemont Project Notice of Intent to Adopt a Mitigated Negative Declaration**

Location: East side of Old 215 Frontage Road south of Cottonwood Avenue, Moreno Valley, Riverside County, California.

Dear Ms. Julia Descoteaux:

Eastern Municipal Water District (EMWD) thanks you for the opportunity to comment on the Cottonwood and Edgemont Project, Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration (MND). The project proposes the development of two light industrial buildings with a total combined building floor area of 99,630 square feet on an approximately 7.94 gross acre property (6.88 net acres). The project would include cargo loading areas at each building, an enclosed truck court with loading docks on the eastern side of the proposed buildings, parking areas, landscaping, signage, and lighting.

EMWD offers the following comments:

To define the impact(s) on the environment and on existing EMWD facilities, and as development within this area occurs over time, the proponents of implementing development projects shall consult EMWD's Development Services Department to compare proposed and existing water demands and sewer flows, and prepare a Design Conditions report (DC), formally known as the Plan of Service (POS), to detail all pertinent facilities necessary to serve such implementing development projects, resulting in an approved DC, prior to final design and plan check of such facilities.

2270 Trumble Road • P.O. Box 8300 • Perris, CA 92572-8300
T 951.928.3777 • F 951.928.6177 www.emwd.org

To help define EMWD's Design Conditions, EMWD requires beginning dialogue with project proponents at an early stage in the site design and development, via a one-hour complementary Due Diligence meeting. To set up this meeting the project proponent should complete a Project Questionnaire (form NBD-058) and submit to EMWD. To download this form or for additional information, please visit our web page www.emwd.org, then select the "Developer" link, then select the "New Development Process Forms" link. This meeting will offer the following benefits:

1. Describe EMWD's development process
2. Identify project scope and parameters
3. Provide a preliminary review of the project within the context of existing infrastructure
4. Discuss potential candidacy for recycled water service
5. Identify project submittal requirements to start the Design Conditions review

Following the Due Diligence meeting, and to proceed with a project, the Design Conditions will need to be developed by the developer's engineer and reviewed/approved by EMWD prior to submitting improvement plans for Plan Check. The DC process and approval will provide the following:

1. Technical evaluation of the project's demands and existing system capacities
2. Identification of impacts to existing facilities
3. Identification of additional on-site and off-site facilities, necessary to serve the project
4. Identification of easement requirements, if necessary
5. Identification of potential EMWD's cost participation in facility oversizing, if applicable

If you have questions or concerns, please do not hesitate to contact Maroun El-Hage at (951) 928-3777, extension 4468 or by e-mail at El-hagem@emwd.org.

Sincerely,

Alfred Javier
Director of Environmental and Regulatory Compliance

ARJ: hs
Attachments: Copy of Public Notice

Julia Descoteaux

From: Vega, Jaqueline <JaVega@RIVCO.ORG>
Sent: Tuesday, February 21, 2023 3:11 PM
To: Julia Descoteaux
Subject: PEN21-0325, PEN21-0326

Hello Julia,

Thank you for transmitting the above referenced project to ALUC for review. Please note that the proposed project is located within zone B1 APZ II and C1 of the March Air Reserve AIA. Additionally ALUC review is not required because the City of Moreno Valley is consistent with the March ALUCP and City staff can conduct the review themselves.

Also, please note that zone B1 APZ II restricts nonresidential intensity to 50 people per average acre and 100 people per single acre, and we also send proposed project to Airforce for review due to the APZ.

Zone C1 restricts non-residential intensity to 100 people per average acre, and 250 people per single acre.

Should you have any questions, please contact me.

Jackie Vega
Urban Regional Planner I

Riverside County Airport Land Use Commission
4080 Lemon Street, 14th Floor
Riverside, Ca 92501
(951) 955-0982
JaVega@RIVCO.ORG
www.rcaluc.org

Victoria Castreje

From: George Hague <gbhague@gmail.com>
Sent: Wednesday, February 22, 2023 1:54 PM
To: Julia Descoteaux
Cc: City Clerk
Subject: Cottonwood & Edgemont (C&E) Comments = Warehouses replace farms as big rigs fill Inland Empire - Los Angeles Times --1

https://www.latimes.com/california/story/2023-02-05/warehouses-big-rigs-fill-inland-empire-streets
This article as well as all its links that it contains are incorporated fully by reference into these comments

Good afternoon Ms Descoteaux,

Re: Comments on Mitigated Negative Declaration (MND) for the Cottonwood & Edgemont (C&E) warehouse project.

The article found below points out several of the problems with locating warehousing at the proposed location of the Cottonwood & Edgemont warehouses. With family homes within 18 feet to 28 feet from the project site and also very close to the the diesel trucks' internal traffic pattern the cumulative impacts they bring will negatively impact those who live and work nearby. The projects' external truck routes upon leaving/entering the freeway also will impact families in their homes and yards. The MND fails to analyze these impacts— direct, indirect and cumulative — as well as to all the homes/sensitive receptors on the perimeter of the project site.

The following are some quotes from the article in the link found above and also below my name that point out some of the negative impacts of the proposed Cottonwood & Edgemont warehouses:

"If you're concerned about the health of the community, you're not going to build a warehouse with diesel trucks coming in and out, spewing diesel particulate matter right next to the schools or right next to the homes," she said. [California Assembly Majority Leader Eloise Gómez Reyes (D-Grand Terrace)]

"But smog in the Inland Empire — largely caused by big-rig exhaust — is the worst in the nation, according to the the American Lung Assn."

"We know diesel exhaust is a killer," said William Barrett, national senior director of clean air advocacy for the American Lung Assn. "It's one of the most damaging things that your lungs can experience."

"Atty. Gen. Rob Bonta said he has been monitoring warehouse development across California for compliance with environmental rules."

"For too long, warehouses have proliferated throughout California with little consideration for the health and safety impacts on the surrounding communities," he said in an emailed statement. "As a result of these poor land use decisions, many low-income communities and communities of color continue to be among the most pollution burdened in the state."

"A lot of time, **kids wake up with bloody noses on their pillows," she said**. "We have the worst air quality. We have gridlock. We have streets and communities that were never built for global logistics. We're basically building, on top of failed infrastructure, a global network." (Amparo Munoz about her children)

The Sierra Club appreciates this opportunity to submit comments on another warehouse project next to family homes in Moreno Valley. Please keep us informed on all future documents and meetings related to this project.

Sincerely,

George Hague
Sierra Club
Moreno Valley Group
Conservation Chair

Warehouse boom transformed Inland Empire. Are jobs worth the environmental degradation?

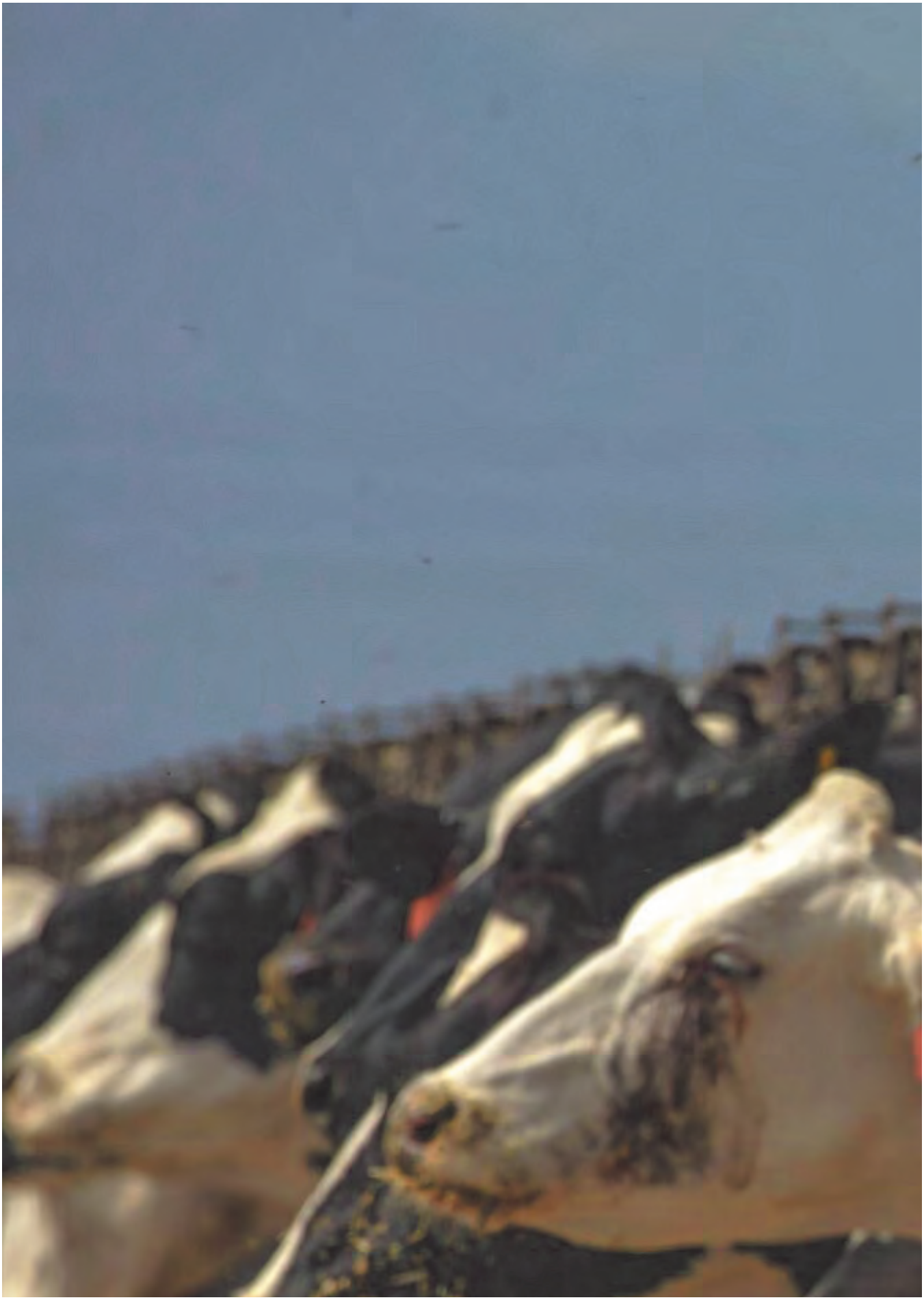
A Walmart distribution center in Eastvale along I-15.

(Robert Gauthier / Los Angeles Times)

For decades, Bosch Dairy in Ontario, where three generations raised cattle, was a bucolic outpost with fields of cows and rows of eucalyptus to cut the driving wind that came down the Cajon Pass.

A few years ago, Bud Bosch noticed semitrailers occasionally rumbling along the two-lane rural road by his property. Soon, dozens were kicking up dust, night and day, plying roads made for tractors.

Bosch thought he had escaped the explosion of warehouse development that has wiped out farmland and open space. But the ecommerce boom of the pandemic accelerated the land grab, and the region became ever more hardscaped into the staging point for trains and trucks carrying goods from the ports of Los Angeles and Long Beach to the rest of the nation.



Bud Bosch, 58, at Bosch Dairy in Ontario.

(Irfan Khan / Los Angeles Times)

There are 170 million square feet of warehouses planned or under construction in the Inland Empire, according to a recent report by environmental groups. And despite fears of a recession, demand hasn't ebbed.

But the rapid transformation of semirural areas into barrens of concrete tilt-up "logistic parks" is encountering a backlash. Residents are questioning whether they want the region's economy, health, traffic and general ambiance tied to a heavily polluting, low-wage industry that might one day pick up and leave as global trade routes shift.

Several Inland Empire cities, including Colton and Norco, have placed building moratoriums on warehouses, as has Pomona, which borders the region. Environmental groups are pushing Gov. Gavin Newsom to declare a state of emergency, hoping to keep new warehouses away from homes and schools, where heavy truck traffic can expose children to high levels of toxic diesel emissions that have been linked to respiratory illness.

"Warehouse-induced pollution has created a state of environmental injustice and a public health crisis in San Bernardino and Riverside counties," dozens of labor, environmental and community groups said in a letter last month urging Newsom to implement a regionwide moratorium on warehouses.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Walmart
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Trucks parked at a Walmart distribution center in Eastvale.

(Robert Gauthier / Los Angeles Times)

The group accused local politicians of environmental racism, ignoring health impacts while collecting donations from developers and their allies.

A spokesperson for Newsom said in an email to The Times that "California is taking urgent action to clean the air in communities hardest hit by pollution," pointing to the governor's order requiring heavy-duty truck manufacturers to transition to zero-emission vehicles by 2045. She did not say whether the governor supports a moratorium.

Local officials like San Bernardino County Supervisor Curt Hagman argue that a halt to building could have grave consequences.

"Lately, critics have called for warehouse moratoriums or outright bans. Their misguided proposals gloss over the real-world and draconian impact their potential bans would have on supply chains in local communities and the entire region," he wrote in an opinion piece in the San Bernardino news outlet the Sun. "If we fail to keep pace with the growing demand for additional warehouse space, the result will be immediate and far-reaching throughout the Inland Empire — loss of good-paying jobs, less affordable housing, fewer environmental benefits and community infrastructure improvements, not to mention the gains other jurisdictions will make at our expense."

On a corner of the Bosch farms, cows lie in the shade of eucalyptus trees. The area was once largely an agricultural zone that has given way over the last decade to home tracts and warehouses. Heavy trucks have cracked the asphalt streets.

"We don't even take the street anymore," said Bosch, pointing to a road that leads to his family's ranch home, where his son and grandchildren now live. He said it's too dangerous.


Walker
YP64498

An Amazon truck negotiates a sharp turn on Schaefer Avenue near Bosch Dairy.

(Irfan Khan / Los Angeles Times)

“The trucks, they don’t watch out. They think it’s a dead street.”

In Ontario, there are an estimated 95,000 daily truck trips — nearly two for every household.

At one point, Bosch sought to expand his dairy farm, but the warehouse economy has become so pervasive that it priced him out.

“I asked one guy if I could rent his dairy, and he said, ‘Nah, why put up with the hassle of you renting?’” Bosch recalled, adding that owners earn more selling parking space. “The income from truck parking is lucrative.”

The logistics industry has moved into a void left as higher-wage jobs in manufacturing, defense and aerospace disappeared, converting largely agricultural and vacant land into the hub of America’s retail economy. The industry added more jobs in the Inland Empire than in any other part of the state. In 2022, it created 24,400 jobs in the area; in 2021, it created 27,400, according to John Husing, an economic consultant who specializes in logistics in the Inland Empire. Median wage ranges from $18.57 an hour for warehouse workers to $24.93 for drivers, he said.

“This is a job generator like mad,” he said. “Amazon has more than a dozen facilities out here. When the pandemic hit and people could not buy services, they converted to buying stuff, and a lot of that was done online. That really increased employment in the logistics out here, and it has held ever since.”

During the height of the pandemic, ecommerce made up 16% of U.S. retail sales, according to government data. Employment in the logistics industry was 51% higher at the end of last year than in February 2020, according to Southern California Assn. of Governments.

Amazon and FedEx big rigs pass a neighborhood en route to warehouses in Jurupa Valley in Riverside County.

(Gina Ferazzi / Los Angeles Times)

Truck drivers delivered every type of consumer good imaginable from the seaports and airports, as workers in the warehouses unloaded, sorted and reloaded them onto intermodal containers to be hauled by train and long-haul tractor-trailers across the deserts.

UPS and FedEx have Southern California regional operations in Ontario International Airport, Husing noted, which has become one of the nation's fastest-growing cargo hubs. Amazon is the region's largest private employer.

But other economists say many of those jobs don't pay close to a living wage. The median hourly pay in the region is almost $5 below the California average, and turnover is high because of the grueling, nonstop work.

"Even with this impressive growth in the Inland Empire, logistics-sector jobs are generally lower-paying jobs, and they're at very high risk of automation," said Gigi Moreno, an economist at the Southern California Assn. of Governments. "You have automation and artificial intelligence in the logistics sector displacing workers, which means that the industry may not be able to support as many jobs as we do today. And this is even before considering any of the moratoriums on building warehousing. This is just the nature of what's going on in the sector."

The changes have strained communities. Many warehouses are built in low-income areas, where residents must put up with the traffic and pollution.

When the San Bernardino County Board of Supervisors met to vote on a project to rezone a semirural neighborhood in Bloomington for a massive warehouse complex, dozens of residents, activists and union construction workers came to speak passionately for and against it.

Warehouse gr

The growth of wareh
square feet of space
In the last 10 years,
Riverside and San B
tool reveals.

SAN BER
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The board unanimously approved it, allowing the developer, Howard Industrial Partners, to build a warehouse and distribution space the size of 56 football fields. To make room, the school district agreed to relocate Zimmerman Elementary.

Environmental justice and conservation groups sued the county for neglecting to properly analyze the potential environmental damage. When operational, their lawyers argue, the complex would add thousands of diesel truck trips daily — on top of the truck traffic already choking the area. The lawsuit is pending, but families have agreed to sell their homes to make way for the new buildings.

“Development is creating an employment base and is an economic driver,” said Tim Howard, a founding partner of Howard Industrial Partners. He said warehouse projects have “transformed cities” like Fontana, providing employment opportunities and raising the quality of life.


Walm
ALTO XPRESS

Diesel truck traffic has increased with the addition of warehouses, causing more air pollution in the Southland.

(Gina Ferazzi / Los Angeles Times)

But smog in the Inland Empire — largely caused by big-rig exhaust — is the worst in the nation, according to the the American Lung Assn.

Last year, California Assembly Majority Leader Eloise Gómez Reyes (D-Grand Terrace) introduced legislation that would have required a 1,000-foot buffer zone between new warehouses and homes, schools, day-care centers, playgrounds and other areas where people gather.

“If you’re concerned about the health of the community, you’re not going to build a warehouse with diesel trucks coming in and out, spewing diesel particulate matter right next to the schools or right next to the homes,” she said.

The bill also tacked on labor requirements for new structures.

But it faced opposition from a wide array of business groups and local municipalities. Hagman, then the chair of the San Bernardino County Board of Supervisors, opposed the legislation, writing to state Senate committee members that it “erodes local land use authority” and could put the county at a competitive disadvantage.

Reyes pulled the proposal after a state Senate committee sought to replace the setback provision with a one-year ban on warehouse construction, a move she felt went too far and would cause further polarization.

“I’ve never been anti-warehouse,” she said. “If in each of our cities and in each of our counties, if they did the planning of the communities in a responsible way, we wouldn’t be dealing with this, right?

“You could still have the warehouses,” she added, “but they would be planned in places where they’re not next to the homes. They’re not next to the schools. They’re not next to the day-care centers.”

Critics say that for too long, local governments have been part of the problem, rubber-stamping the projects and ignoring state environmental laws and the progressive damage that warehouses have caused communities.

There is “a very weak and minimal analysis” of the environmental damage distribution centers have wrought, said Susan Phillips, director of the Robert Redford Conservancy

for Southern California Sustainability. Working with Radical Research, a consulting group specializing in atmospheric pollution, the conservancy released a mapping tool, "Warehouse City," that shows the breadth of industry in the region overlaid with estimated truck trips generated and public data on pollution.

The environmental impact reports that are required by the state, she said, "are supposed to account for cumulative impacts, but they're rarely adequate."

The tool shows that the region has roughly 4,000 warehouses covering more than 1.5 billion square feet, including parking lots. More than 300 warehouses are 1,000 feet or less from 139 schools.

"The number of warehouses and the square footage of warehouses is mind-boggling," she said.

Thirty years ago, there were 1,600 warehouses in the region, creating 140,000 truck trips daily, said Mike McCarthy, who runs Radical Research. The mapping found that the industry now generates more than half a million daily truck trips — nearly four times the diesel traffic as the population has almost doubled. The researchers also found that the average warehouse 30 years ago was about half the size of those built today, which average 500,000 square feet.

"They are running out of space; they are starting to go into the high desert, Imperial Valley and even the Central Valley," Phillips said. "But they're not stopping putting warehouses next to homes and schools in the Inland Empire. The amount of space they are using is leaving little space for anything else."

The diesel trucks that serve warehouses spew out a cocktail of pollutants, including particulates that lodge in human lungs. Studies have linked the pollution to asthma, decreased lung function in children and cancer.

"We know diesel exhaust is a killer," said William Barrett, national senior director of clean air advocacy for the American Lung Assn. "It's one of the most damaging things that your lungs can experience."

The rise in pollution and fears over climate change have pushed California air regulators to seek to ban the sale of diesel big rigs by 2040. In Southern California, regulators are attempting to limit emissions from warehouses.

Atty. Gen. Rob Bonta said he has been monitoring warehouse development across California for compliance with environmental rules.

“For too long, warehouses have proliferated throughout California with little consideration for the health and safety impacts on the surrounding communities,” he said in an emailed statement. “As a result of these poor land use decisions, many low-income communities and communities of color continue to be among the most pollution burdened in the state.”

An Amazon warehouse is visible from Bosch Dairy.

(Irfan Khan / Los Angeles Times)

Around the Bosch property in Ontario, much of what was once a capital of America's dairy farms is now the nation's capital of warehouses. There are more than 600 in the city, which has a population of 178,000. Dusty pastures disappeared as farmers fled to Texas, South Dakota and other states, and stately ranch homes became makeshift repair shops for big rigs.

"With COVID-19 and Amazon being like a superpower, you know, the warehouse craze just went crazy around here," Bosch said. "I guess it's progress, you know. I don't like it so much."

The market is so hot for warehouses that they are leased before they are even built, said Eloy Covarrubias, an investment broker at CBRE, specializing in industrial property. He estimates that there are between 38 million and 39 million square feet under construction — and more than half is already leased.

"There has been a significant amount of pent-up demand for that space," he said, noting that the vacancy rate is about 1%.

That has cost the Inland Empire its agricultural roots, said Amparo Muñoz, former policy director at the Center for Community Action and Environmental Justice, a Jurupa Valley group that has been fighting warehouse development and signed the letter to Newsom.

Muñoz didn't start off as an environmentalist. A trained engineer, she spent some of her time in warehouses checking and maintaining equipment.

"I really believed that if you let businesses regulate themselves, they do the right thing," she said.

Her ideas changed after she had her second child. She had moved to Fontana a few years before, to a tract of homes surrounded by fields. She loved the pastoral life, the agricultural clubs and bunny farms. But by the time she was pregnant in 2013, an Amazon warehouse had been built less than two blocks from her home.

"At first you are like, hey, it's not too bad," she said.

She walked daily along the perimeter of her neighborhood to stay fit while pregnant, but what she thought were allergies worsened until she couldn't breathe.

“The doctor asked me how long I had had asthma, and I was like ‘What? I don’t have asthma.’”

She learned that she had developed the condition in her 30s. Her son was born with asthma and had to have a breathing mechanism for the first year of his life.

“They told me it was environmental factors,” she said. “I didn’t think about all the trucks that were idling at the warehouse when I was walking by them.”

The family spent around $22,000 to install high-grade air filters and a new duct system in their home.

“A lot of time, kids wake up with bloody noses on their pillows,” she said. “We have the worst air quality. We have gridlock. We have streets and communities that were never built for global logistics. We’re basically building, on top of failed infrastructure, a global network.”

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

SENT VIA E-MAIL:
juliad@moval.org
Julia Descoteaux, Senior Planner
City of Moreno Valley
14177 Frederick Street
Moreno Valley, California 92552

February 23, 2023

Mitigated Negative Declaration (MND) for the Proposed Cottonwood & Edgemont Project (Proposed Project) Master Plot Plan PEN21-0325, Plot Plan PEN21-0326

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The City of Moreno Valley is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. The following comments recommended revisions to the EMFAC version, health risk assessment analysis, inconsistent information during grading activities, and concept design & orientation that the Lead Agency should include in the Final MND.

South Coast AQMD Staff's Summary of Project Information in the MND

Based on the MND, the Proposed Project consists of developing two 49,815 square feet of light industrial buildings with a total combined floor area of 99,630 square feet on an approximately 7.94-gross-acre property.[1] The Proposed Project locates on the east side of Old 125 Frontage Road, approximately 500 feet south of Cottonwood Avenue and approximately 620 feet north of Bay Avenue, City of Moreno Valley.[2] The Proposed Project would include nine (9) dock doors on the east side of each building,[3] associated with 34 one-way truck trips per day.[4] The Proposed Project would have three driveways along Old 125 Frontage Road, with the northernmost and southernmost driveways for passenger vehicles and heavy trucks to access the site.[5] Based on the ariel photographs, South Coast AQMD staff finds that the nearest sensitive receptors (e.g., residences) are less than 20 feet north/northeast and within 60 feet east of the Proposed Project. The Proposed Project's construction is anticipated to occur over eight months, assumed to commence in February 2023 and finish in October 2023.[6]

[1] MND. Page 1.
[2] *Ibid*.
[3] *Ibid*. Page 2.
[4] *Ibid*. Appendix K3- Traffic Analysis. Page 37.
[5] *Ibid*. Page 3.
[6] *Ibid*. Page 6.

South Coast AQMD Staff's Comments on the MND

EMFAC Version

According to Appendix A – Air Quality Impact Analysis, the Proposed project's operational emissions are analyzed utilizing EMFAC2017 emissions factors to derive vehicle emissions. [7] According to the CARB, the EMFAC 2021[8] was officially released in January 2021. Since the Proposed Project MND was prepared in February 2023, South Coast AQMD staff recommends that the Lead Agency revise the emissions calculations utilizing the EMFAC 2021 emissions factors and include in the Final MND. If the revision is not included in the Final MND, the Lead Agency should provide reasons for not having them supported by substantial evidence in the record.

On the other hand, the Lead Agency could go a step further since CARB has updated the EMFAC 2021 v1.0.2 in April 2022,[9] and the Lead Agency can consider using it for the revision of analysis in the Final MND. If the Lead Agency decides to use the most current updated versions of EMFAC 2021 v1.0.2, South Coast AQMD staff encourage the Lead Agency to visit CARB's website for more information.

Health Risk Assessment (HRA) Analysis

Averaging Time Utilized in Construction and Operational HRA Analysis
Based on the construction and operational HRA output files, the averaging time for the analysis is ANNUAL. [10] However, according to the South Coast AQMD Risk Assessment Procedures v8.1, the detailed HRA utilizing AERMOD should be run using the averaging time PERIOD and 1-hour.[11] Since the construction and operational HRAs of the Proposed Project using ANNUAL, South Coast AQMD staff recommend that the Lead Agency re-run the construction and operational HRAs utilizing PERIOD and 1-hour averaging time to determine the health risk impacts to the sensitive receptors and off-site workers and include the revised results in the Final MND. If the revision is not included in the Final MND, the Lead Agency should provide reasons for not having them supported by substantial evidence in the record.

Building Downwash Option in Operational HRA Modeling
Based on the South Coast AQMD staff review, the HRA modeling file does not include the building downwash option in the operational HRA. The ground-level pollutant concentrations near the building would be underestimated if the downwash effects were absent in the dispersion modeling. Therefore, building downwash should be considered for the Proposed Project operation in order to predict more accurate ground-level concentrations. In addition, the truck idling emissions would need to be estimated separately and included in the dispersion modeling analysis and HRA as point sources. However, the operational HRA modeling file indicates those emissions as line volume source types. In addition, it needs to be clarified in the MND if the stationary

[7] *Ibid*. Appendix A – Air Quality Impact Analysis. Page 45.
[8] CARB EMFAC 2021. Access at: https://arb.ca.gov/emfac
[9] CARB EMFAC 2021 v1.0.2. Access at: https://arb.ca.gov/emfac
[10] *Ibid*. Appendix A – Mobile Source Health Risk Assessment. Pages 73 and 245 of PDF.
[11] South Coast AQMD Risk Assessment Procedures v8.1. Access at: http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf

combustion engines (e.g., diesel firewater pump, diesel emergency generator, etc.) will be used on-site during operation. If any of these will be used when implementing the Proposed Project, they will need to be added as additional sources to the HRA and dispersion modeling files. Therefore, South Coast AQMD staff recommend that the Lead Agency revise the operational HRA modeling by incorporating the above recommendations and including the HRA results in the Final MND. If the HRA modeling is not revised and included in the Final MND, the Lead Agency should provide reasons supported by substantial evidence in the record to explain why the revision is not included.

Inconsistent Information During Grading Activities

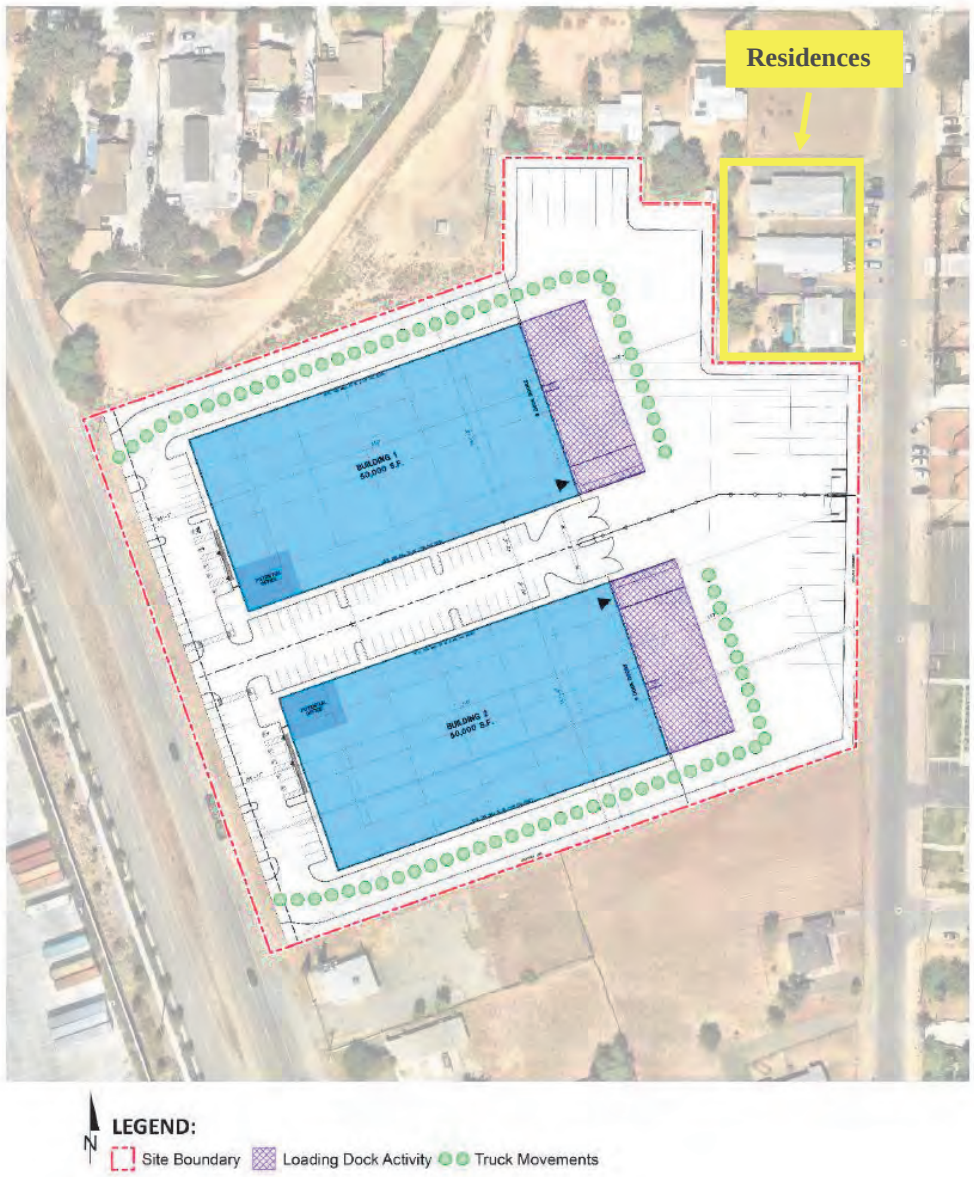
Under the Construction Characteristic section of the MND, the earthwork activities are expected to be balanced, and no import or export of soil materials would be required.[12] However, Appendix A – Air Quality Impact Analysis discloses that the Proposed Project is anticipated to require 10,600 cubic yards of export[13] during grading activities. Furthermore, California Emissions Estimator Model (CalEEMod) output files show hauling truck trips associated with the grading activities, confirming the material information export discussed in Appendix A. Due to the inconsistency, South Coast AQMD staff recommends that the Lead Agency revise the export/import information and include the revision in the Final MND to avoid discrepancies throughout the Final MND and its appendices. If the revision is not included in the Final MND, the Lead Agency should provide reasons for not having them supported by substantial evidence in the record.

Concept Design and Orientation

Based on the MND, the Proposed Project would have nine (9) dock doors located on the east side of each building.[14] Based on the aerial photograph and Figure A below, South Coast AQMD staff is concerned about the loading dock orientation of the Proposed Project. These loading docks face Edgemont Street, where sensitive receptors (e.g., residences) are located, as noted in Figure A.

[12] *Ibid*. Page 6.
[13] *Ibid*. Appendix A – Air Quality Impact Analysis. Page 39.
[14] *Ibid*. Page 2.

Figure A
Loading Docks and Truck Movements[15]



As a result, South Coast AQMD staff recommends that the Lead Agency re-consider the Proposed Project buildings' design/orientation, such as placing loading docks further away from the sensitive receptors, to help reduce the impacts of the operational activities on the sensitive receptors. In the event that the Proposed Project's design is revised, the Lead Agency should include the new design and its associated analysis (e.g., emissions calculations, HRA) in the Final MND.

[15] *Ibid*. Appendix A – Mobile Source Health Risk Assessment. Page 16.

Conclusion

Pursuant to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Final MND. When responding to issues raised in the comments, responses should provide sufficient details giving reasons why specific comments and suggestions are not accepted. There should be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision-makers and the public who are interested in the Proposed Project.

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Danica Nguyen, Air Quality Specialist, at dnguyen1@aqmd.gov should you have any questions.

Sincerely,

Sam Wang

Sam Wang
Program Supervisor, CEQA-IGR
Planning, Rule Development & Implementation

SW:DN
RVC230214-01
Control Number

Sean P. Kelleher

From: George Hague <gbhague@gmail.com>
Sent: Friday, February 24, 2023 4:56 PM
To: Julia Descoteaux
Cc: City Clerk
Subject: Comments on Cottonwood & Edgemont (C&E) warehouse Initial Study/Mitigated Negative Declaration (IS/MND) & AG --2

Good afternoon Ms Descoteaux, February 24, 2023

RE: Comments on Cottonwood & Edgemont (C&E) warehouse Initial Study/Mitigated Negative Declaration (IS/MND)

The Press-Enterprise article found believe begins as follows: California Attorney General Rob Bonta is joining the Sierra Club's lawsuit against Moreno Valley over the city's long-term plan that both parties allege fails to protect the environment and residents.

The state Attorney General filed their lawsuit against Moreno Valley in large part because the city's Climate Action Plan (CAP) failed to meet state requirements.
The C&E's GHG analysis is inadequate because the current Moreno Valley CAP doesn't satisfy CEQA Guidelines section 15183.5(b).

The two sections found below from Appendix G shows that the C&E is using Moreo Valley's CAP to tier off of ands justify its GHG analysis, impacts and mitigations.

2.8 City of Moreno Valley

"City of Moreno Valley General Plan Measures

Although the City of Moreno Valley General Plan does not identify specific GHG or climate change policies or goal, a number of the measures identified in the General Plan's Air Quality Element act to reduce or control criteria pollutant emissions and peripherally reduce GHG emissions.

City of Moreno Valley CAP

The City of Moreno Valley CAP was adopted on June 15, 2021. The CAP addresses the SB 32 target of reducing GHG emissions 40% below 1990 levels by 2030 and the GHG emission target set in EO S-3-15 for 2050 (i.e., 80% below 1990 levels by 2050). Pursuant with CEQA Guidelines Section 15183.5(b), the CAP is considered a qualified GHG reduction strategy that will allow developments to tier off and streamline the GHG analyses under CEQA. The CAP is a qualified GHG reduction strategy since it completed the following steps required to be considered qualified: the GHG reduction strategy quantified community-wide GHG emissions; the GHG reduction strategy prepared GHG projections for the next target year (e.g. 2030) for business-as- usual (BAU) conditions and conditions that include GHG reduction measures; the GHG reduction strategy established emission level targets based on substantial evidence; the GHG reduction strategy specified mandatory and enforceable reduction measures that are applicable to existing developments, new developments, and

municipal operations; the GHG reduction strategy includes an implementation and monitoring plan to monitor the plan's progress; the GHRS underwent CEQA review and was adopted after public hearings. Thus, the 2030 GHG reduction strategy is a qualified CAP that projects can tier off of for CEQA review. In addition, the CAP includes a consistency checklist for project-level tiering purposes." (GHG Appendix G page 47)

"CONSISTENCY WITH CITY OF MORENO VALLEY CAP

The CAP is a qualified GHG reduction strategy since it completed the following steps required to be considered qualified: the GHG reduction strategy quantified community-wide GHG emissions; the GHG reduction strategy prepared GHG projections for the next target year for BAU conditions and conditions that include GHG reduction measures; the GHG reduction strategy established emission level targets based on substantial evidence; the GHG reduction strategy specified mandatory and enforceable reduction measures that are applicable to existing developments, new developments, and municipal operations; the GHG reduction strategy includes an implementation and monitoring plan to monitor the plan's progress; the GHRS underwent CEQA review and was adopted after public hearings. Thus, the 2030 GHG reduction strategy is a qualified CAP that projects can tier off of for CEQA review. In addition, the CAP includes a consistency checklist for project-level tiering purposes. GHG emissions associated with the proposed project would be less than significant if the project is consistent with the Climate Action Plan Consistency Checklist. Table 6-3 shows the projects consistency with the CAP checklist." (GHG Appendix G pages 62/63).

Tiering off of Moreno Valley's fatally flawed CAP makes this project fatally flawed. The city posted a warning on line to developers to basically proceed at your own risk because the General Plan Update and Climate Action Plan is under litigation. It appears the C&E warehouse is willing to take this chance knowing the documents they rely on may be proved invalid and/or significant changed.

The city is processing the following four warehouse projects:

Moreno Valley Trade Center (MVTC) is across a two lane street from families. It is proposed on land zoned for homes, adjacent to land zoned for future homes, across the street from homes and needs a General Plan Amendment from a General Plan that is less than two years old to be allowed.

Heacock Commerce Center (HCC) two warehouses are only 20 feet from homes and across the street from other homes. Much of the land is currently zoned for homes and based on the 2021 General Plan the entire site will need a General Plan amendment to allow warehousing.

Edgemont Commerce Center (ECC) warehouse is only 10 feet away from homes and across the street from others. It is on land that would need a zone change of the June 2021 General Plan to allow it to be built.

Cottonwood & Edgemont (C&E) warehouse basically fits into this pattern of siting toxic diesel warehouse projects near where families live -18 ft to 28 ft.

Moreno Valley Business Center (MVBC) was recently approved with the warehouse sharing a common property line with family homes.

The cumulative impacts section with all current and foreseeable projects needs to be addressed. When it isn't you know the importance of requiring a full EIR on this warehouse project that more fully addresses direct, indirect as well as cumulative impacts to the environment and nearby sensitive receptors — like children and the elderly.

Please keep me informed of all future documents and meetings related to this project.

Sincerely,

George Hague
Sierra Club
Moreno Valley Group
Conservation Chair

Attorney General joins environmental lawsuit against Moreno Valley

By **MONSERRAT SOLIS** | msolis@scng.com |
PUBLISHED: July 1, 2022 at 6:58 p.m. | UPDATED: July 1, 2022 at 7:55 p.m.

California Attorney General Rob Bonta is joining the Sierra Club's lawsuit against Moreno Valley over the city's long-term plan that both parties allege fails to protect the environment and residents.

A year ago, the Sierra Club sued the city for approving its 2040 general plan update, alleging that it violated the California Environmental Quality Act.

The lawsuit alleged that Moreno Valley's environmental impact report failed to address public health impacts, did not disclose potential air pollution and left out solutions that could reduce environmental impacts. The Sierra Club alleged the city used outdated environmental reports rather than the city's current state, which includes many warehouses.
Bonta's decision to "intervene" in the case means his office is now a separate plaintiff in the case, according to a Friday, July 1, statement from the Attorney General's press office. The office "will represent the People's interests in enforcing California laws designed to protect public safety and the environment," the statement says.

California Attorney General Rob Bonta, seen at a news conference in Riverside on Thursday, May 26, 2022, has joined an environmental lawsuit against the city of Moreno Valley. (File photo by Terry Pierson, The Press-Enterprise/SCNG)
Tom Thornsley, chair of Moreno Valley's Sierra Club, welcomed Bonta's move.

"To see them actually getting involved, is really kind of nice," he said. "I'm delighted."

Bonta criticized the city for increasing development in Moreno Valley, which has seen controversy over what some see as a saturation of warehouses.
"Communities in Moreno Valley experience some of the highest levels of air pollution in the state," Bonta said in a news release. "We're intervening today so that those communities do not continue to bear the brunt of poor land use decisions that site warehouses outside their doors."

Bonta alleges the city failed to determine whether the general plan would increase pollutants and pollution near hospitals, school and other sensitive areas. In June, a proposed 1.26 million square-foot warehouse called the Moreno Valley Trade Center was set for the city council's consideration but postponed by the developer.
Moreno Valley's Interim City Attorney Steve Quintanilla said Friday that he wasn't surprised by Bonta's involvement.

"I believe the city has done everything they should have done under CEQA,' Quintanilla said by phone.

Quintanilla said he isn't concerned over Bonta's intervention because the Attorney General's office didn't raise additional issues beyond those already in the Sierra Club's suit.

As for Bonta, he alleged in the release, that health issues are affecting Moreno Valley communities that "live at the intersection of poverty and pollution."

RELATED LINKS

- **Moreno Valley sued by Sierra Club, alleging environmental law violations**
- **Moreno Valley ignored environmental law when it OK'd World Logistics Center, California Attorney General says**
- **State sues Fontana to block sprawling warehouse project in low-income area**
- **Fontana, state AG settle lawsuit over warehouse project in low-income neighborhood**

In Moreno Valley, 60% of the population is Hispanic, 17% is Black and 5% is Asian, according to the 2020 Census. The average income per person is $22,364.
Moreno Valley is listed on the CalEnviroScreen, a mapping tool from the state Office of Environmental Health Hazard Assessment, as a disadvantaged community affected by pollution and where residents are often vulnerable to its effects.
This isn't the first time the state Attorney General has called out Inland Empire cities for what it sees as poor environmental impacts.

Former Attorney General Xavier Becerra — now secretary for the U.S. Department of Health and Human Services — accused Moreno Valley of ignoring state environmental laws when it approved the World Logistics Center for the city's east end in 2015.
Last year, Bonta sued Fontana over a giant warehouse project in a low-income communitythat he said violated environmental laws, but later settled the suit.

From: CMT Torres
To: Julia Descoteaux; City Clerk
Subject: Cottonwood and Edgemont Project
Date: Saturday, February 25, 2023 8:20:29 PM

To the planning commission regarding the Cottonwood and Edgemont project,

Two brief comments:
1. No more warehouses
2. Please take a cue from many other SoCal cities and issue a moratorium.

Thank you,

Christina Torres
Bridger St.
Moreno Valley, CA

From:	Julia Descoteaux
To:	Catherine Lin
Subject:	Fwd: Vote NO on warehiouse at Edgemont & Cottonwood
Date:	Monday, February 27, 2023 10:11:55 AM

See attached

Get Outlook for iOS

Julia Descoteaux
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3209 | e: juliad@moval.org w: www.moval.org
14177 Frederick St., Moreno Valley, CA, 92553

From: Marcia Narog <mgnarog@gmail.com>
Sent: Sunday, February 26, 2023 8:47:48 AM
To: Julia Descoteaux <juliad@moval.org>; City Clerk <cityclerk@moval.org>
Subject: Vote NO on warehiouse at Edgemont & Cottonwood

To all City Planning Commissioners and City Council:

I am opposed to ANY more warehouses in Moreno Valley because of the air and noise pollution, traffic and road problems and the destruction of the neighborhood ambiance that they bring.
If you wouldn't want a warehouse in close proximity to your home, then you should vote against any that compromise the lives of other Moreno Valley citizens.
Please institute a moratorium on Moreno Valley warehouse development especially in close proximity to family homes.

Sincerely,

Marcia Narog

Sean P. Kelleher

From: George Hague <gbhague@gmail.com>
Sent: Sunday, February 26, 2023 8:36 PM
To: Julia Descoteaux
Cc: Sean P. Kelleher; City Clerk
Subject: Comments on the Cottonwood & Edgemont (C&E) warehouse Initial Study/Mitigated Negative Declaration (IS/MND) & AG & CARB -- 3

Follow Up Flag: Follow up
Flag Status: Completed

Good morning Ms Descoteaux, February 26, 2023

RE: Comments on the Cottonwood & Edgemont (C&E) warehouse Initial Study/Mitigated Negative Declaration (IS/MND) The state Attorney General (AG) has provide the warehouse guidelines found below for "Warehouse Project: **Best Practices and Mitigation Measures** to Comply with the California Environmental Quality Act" beginning with section IV on page 4. The Cottonwood & Edgemont (C&E) warehouse project has significantly failed to this date to incorporate most of these Best Practices and Mitigation measure in all environmental documents/staff report and therefore they will be inadequate unless they are included in the final project. There needs to be full analysis of all of this Best Practices and Mitigations and how they will make the project much better for people and the environment — **especially in our non-attainment area and in this census tract where the residents are in the worst 1% of all of California for pollution and other socio-economic impact** according to CalEnviroScreen. This would be best realized with a full EiR and not relying on the much cheaper as well as less thorough, less analyzations, less remedies provided, and less responsive to the public MND.

The Attorney General (AG) office has made these Best Practices and Mitigation Measures for warehouses available well before the application and before the MND by the C&E developer to build a warehouse in this location. Most Moreno Valley planners have also received them either from me and/or other sources prior to processing the C&E. There is no excuse for not making them part of this project from day one. **In fact if the developer/city implemented the first paragraph found below the C&E warehouse would not even been proposed on this site which it is only 18 ft to 28 ft from several family homes — sensitive receptors.**

AG's Warehouse Project: **Best Practices and Mitigation Measures** beginning with section IV on page 4 follows below:

IV. Warehouse Siting and Design Considerations

The most important consideration when planning a logistics facility is its location. Warehouses located in residential neighborhoods or near other sensitive receptors expose community residents and those using or visiting sensitive receptor sites to the air pollution, noise, traffic, and other environmental impacts they generate. Therefore, placing facilities away from sensitive receptors significantly reduces their environmental and quality of life harms on local

Page 4

communities. The suggested best practices for siting and design of warehouse facilities does not relieve lead agencies' responsibility under CEQA to conduct a project-specific analysis of the project's impacts and

evaluation of feasible mitigation measures and alternatives; lead agencies' incorporation of the best practices must be part of the impact, mitigation and alternatives analyses to meet the requirements of CEQA. Examples of best practices when siting and designing warehouse facilities include:

- • Per CARB guidance, siting warehouse facilities so that their property lines are at least 1,000 feet from the property lines of the nearest sensitive receptors.[14]
- • Creating physical, structural, and/or vegetative buffers that adequately prevent or substantially reduce pollutant dispersal between warehouses and any areas where sensitive receptors are likely to be present, such as homes, schools, daycare centers, hospitals, community centers, and parks.
- • Providing adequate areas for on-site parking, on-site queuing, and truck check-in that prevent trucks and other vehicles from parking or idling on public streets.
- • Placing facility entry and exit points from the public street away from sensitive receptors, e.g., placing these points on the north side of the facility if sensitive receptors are adjacent to the south side of the facility.
- • Locating warehouse dock doors and other onsite areas with significant truck traffic and noise away from sensitive receptors, e.g., placing these dock doors on the north side of the facility if sensitive receptors are adjacent to the south side of the facility.
- • Screening dock doors and onsite areas with significant truck traffic with physical, structural, and/or vegetative barriers that adequately prevent or substantially reduce pollutant dispersal from the facility towards sensitive receptors.
- • Posting signs clearly showing the designated entry and exit points from the public street for trucks and service vehicles.
- • Posting signs indicating that all parking and maintenance of trucks must be conducted within designated on-site areas and not within the surrounding community or public streets.

V. Air Quality and Greenhouse Gas Emissions Analysis and Mitigation

Emissions of air pollutants and greenhouse gases are often among the most substantial environmental impacts from new warehouse facilities. CEQA compliance demands a proper accounting of the full air quality and greenhouse gas impacts of logistics facilities and adoption of all feasible mitigation of significant impacts. Although efforts by CARB and other authorities to regulate the heavy-duty truck and off-road diesel fleets have made excellent progress in reducing the air quality impacts of logistics facilities, the opportunity remains for local jurisdictions to further mitigate these impacts at the project level. Lead agencies and developers

[14] California Air Resources Board (CARB), Air Quality and Land Use Handbook: A Community Health Perspective (April 2005), at ES-1. CARB staff has released draft updates to this siting and design guidance which suggests a greater distance may be warranted under varying scenarios; this document may be found on CARB's website and is entitled: "California Sustainable Freight Initiative: Concept Paper for the Freight Handbook" (December 2019).

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should also consider designing projects with their long-term viability in mind. Constructing the necessary infrastructure to prepare for the zero-emission future of goods movement not only reduces a facility's emissions and local impact now, but it can also save money as regulations tighten and demand for zero-emission infrastructure grows. In planning new logistics facilities, the Bureau strongly encourages developers to consider the local, statewide, and global impacts of their projects' emissions.

Examples of best practices when studying air quality and greenhouse gas impacts include:

- • Fully analyzing all reasonably foreseeable project impacts, including cumulative impacts. In general, new warehouse developments are not ministerial under CEQA because they involve public officials' personal judgment as to the wisdom or manner of carrying out the project, even when warehouses are permitted by a site's applicable zoning and/or general plan land use designation. CEQA Guidelines § 15369.
- • When analyzing cumulative impacts, thoroughly considering the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds.
- • Preparing a quantitative air quality study in accordance with local air district guidelines.
- • Preparing a quantitative health risk assessment in accordance with California Office of Environmental Health Hazard Assessment and local air district guidelines.
- • Refraining from labeling compliance with CARB or air district regulations as a mitigation measure—compliance with applicable regulations is a baseline expectation.
- • Fully analyzing impacts from truck trips. CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations, rather than the distance from the facility to the edge of the air basin. Emissions beyond the air basin are not speculative, and, because air pollution is not static, may contribute to air basin pollution. Moreover, any contributions to air pollution outside the local air basin should be quantified and their significance should be considered.
- • Accounting for all reasonably foreseeable greenhouse gas emissions from the project, without discounting projected emissions based on participation in California's Cap-and-Trade Program.

  Examples of measures to mitigate air quality and greenhouse gas impacts from construction are below. To ensure mitigation measures are enforceable and effective, they should be imposed as permit conditions on the project where applicable.

• Requiring off-road construction equipment to be zero-emission, where available, and all diesel-fueled off-road construction equipment, to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable

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bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.

- • Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- • Requiring on-road heavy-duty haul trucks to be model year 2010 or newer if diesel-fueled.
- • Providing electrical hook ups to the power grid, rather than use of diesel-fueled generators, for electric construction tools, such as saws, drills and compressors, and using electric tools whenever feasible.
- • Limiting the amount of daily grading disturbance area.
- • Prohibiting grading on days with an Air Quality Index forecast of greater than 100

  for particulates or ozone for the project area.

- • Forbidding idling of heavy equipment for more than two minutes.
- • Keeping onsite and furnishing to the lead agency or other regulators upon request,

all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.

- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.

Examples of measures to mitigate air quality and greenhouse gas impacts from operation include:

- Requiring that all facility-owned and operated fleet equipment with a gross vehicle weight rating greater than 14,000 pounds accessing the site meet or exceed 2010 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Facility operators shall maintain records on-site demonstrating compliance with this requirement and shall make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring all heavy-duty vehicles entering or operated on the project site to be zero-emission beginning in 2030.
- Requiring on-site equipment, such as forklifts and yard trucks, to be electric with the necessary electrical charging stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than two minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all

dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the air district, and the building manager.

- Installing and maintaining, at the manufacturer’s recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of

facility for the life of the project.

- Installing and maintaining, at the manufacturer's recommended maintenance

  intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.

- Constructing electric truck charging stations proportional to the number of dock doors at the project.
- Constructing electric plugs for electric transport refrigeration units at every dock door, if the warehouse use could include refrigeration.
- Constructing electric light-duty vehicle charging stations proportional to the number of parking spaces at the project.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity, such as equal to the building's projected energy needs.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient

  scheduling and load management to eliminate unnecessary queuing and idling of

  trucks.

- Requiring operators to establish and promote a rideshare program that discourages

  single-occupancy vehicle trips and provides financial incentives for alternate

  modes of transportation, including carpooling, public transit, and biking.

- Meeting CalGreen Tier 2 green building standards, including all provisions

  related to designated parking for clean air vehicles, electric vehicle charging, and

  bicycle parking.

- Achieving certification of compliance with LEED green building standards.
- Providing meal options onsite or shuttles between the facility and nearby meal

  destinations.

- Posting signs at every truck exit driveway providing directional information to the

  truck route.

- Improving and maintaining vegetation and tree canopy for residents in and around

  the project area.

- • Requiring that every tenant train its staff in charge of keeping vehicle records in

  diesel technologies and compliance with CARB regulations, by attending CARB- approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.

- • Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants to use carriers that are SmartWay carriers.

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• Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

VI. Noise Impacts Analysis and Mitigation

The noise associated with logistics facilities can be among their most intrusive impacts to nearby sensitive receptors. Various sources, such as unloading activity, diesel truck movement, and rooftop air conditioning units, can contribute substantial noise pollution. These impacts are exacerbated by logistics facilities' typical 24-hour, seven-days-per-week operation. Construction noise is often even greater than operational noise, so if a project site is near sensitive receptors, developers and lead agencies should adopt measures to reduce the noise generated by both construction and operation activities.

Examples of best practices when studying noise impacts include:

- • Preparing a noise impact analysis that considers all reasonably foreseeable project noise impacts, including to nearby sensitive receptors. All reasonably foreseeable project noise impacts encompasses noise from both construction and operations, including stationary, on-site, and off-site noise sources.
- • Adopting a lower significance threshold for incremental noise increases when baseline noise already exceeds total noise significance thresholds, to account for the cumulative impact of additional noise and the fact that, as noise moves up the decibel scale, each decibel increase is a progressively greater increase in sound pressure than the last. For example, 70 dBA is ten times more sound pressure than 60 dBA.

  Examples of measures to mitigate noise impacts include:

- • Constructing physical, structural, or vegetative noise barriers on and/or off the project site.
- • Locating or parking all stationary construction equipment as far from sensitive receptors as possible, and directing emitted noise away from sensitive receptors.
- • Verifying that construction equipment has properly operating and maintained mufflers.
- • Requiring all combustion-powered construction equipment to be surrounded by a noise protection barrier
- • Limiting operation hours to daytime hours on weekdays.
- • Paving roads where truck traffic is anticipated with low noise asphalt.
- • Orienting any public address systems onsite away from sensitive receptors and

  setting system volume at a level not readily audible past the property line.

VII. Traffic Impacts Analysis and Mitigation

Warehouse facilities inevitably bring truck and passenger car traffic. Truck traffic can present substantial safety issues. Collisions with heavy-duty trucks are especially dangerous for passenger cars, motorcycles, bicycles, and pedestrians. These concerns can be even greater if

truck traffic passes through residential areas, school zones, or other places where pedestrians are common and extra caution is warranted.

Examples of measures to mitigate traffic impacts include:

- • Designing, clearly marking, and enforcing truck routes that keep trucks out of residential neighborhoods and away from other sensitive receptors.
- • Installing signs in residential areas noting that truck and employee parking is prohibited.
- • Constructing new or improved transit stops, sidewalks, bicycle lanes, and crosswalks, with special attention to ensuring safe routes to schools.
- • Consulting with the local public transit agency and securing increased public transit service to the project area.
- • Designating areas for employee pickup and drop-off.
- • Implementing traffic control and safety measures, such as speed bumps, speed

  limits, or new traffic signs or signals.

- • Placing facility entry and exit points on major streets that do not have adjacent

  sensitive receptors.

- • Restricting the turns trucks can make entering and exiting the facility to route

  trucks away from sensitive receptors.

- • Constructing roadway improvements to improve traffic flow.
- • Preparing a construction traffic control plan prior to grading, detailing the

  locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.

VIII. Other Significant Environmental Impacts Analysis and Mitigation

Warehouse projects may result in significant environmental impacts to other resources, such as to aesthetics, cultural resources, energy, geology, or hazardous materials. All significant adverse environmental impacts must be evaluated, disclosed and mitigated to the extent feasible under CEQA. Examples of best practices and mitigation measures to reduce environmental impacts that do not fall under any of the above categories include:

- • Appointing a compliance officer who is responsible for implementing all mitigation measures, and providing contact information for the compliance officer to the lead agency, to be updated annually.
- • Creating a fund to mitigate impacts on affected residents, schools, places of worship, and other community institutions by retrofitting their property. For example, retaining a contractor to

retrofit/install HVAC and/or air filtration systems, doors, dual-paned windows, and sound- and vibration-deadening insulation and curtains.

- • Sweeping surrounding streets on a daily basis during construction to remove any construction-related debris and dirt.
- • Directing all lighting at the facility into the interior of the site.

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- • Using full cut-off light shields and/or anti-glare lighting.
- • Using cool pavement to reduce heat island effects.
- • Installing climate control in the warehouse facility to promote worker well-being.
- • Installing air filtration in the warehouse facility to promote worker well-being.

The final environmental documents must make sure what you read above from the AG's office is incorporated into this possible warehouse project to protect current nearby residents as well as warehouse workers from both the project site as well as from the project's diesel equipment/truck traffic.. The impacts to the environment will be significantly reduced in our non-attainment area if the project's final documents/staff report/conditions of approval includes what the AG provided above — but currently doesn't. Current C&E documents fail to incorporate suggested reasonable/feasible mitigation in areas such as Noise, Traffic, Light Pollution, Renewable Energy, Air Quality, and Greenhouse Gas (GHG) in both construction and operation. The current C&E's IS/MND doesn't even analyze those listed in the previous sentence for direct, indirect, cumulative and growth inducing impacts

To reduce the exposure of toxic diesel PM emissions in disadvantaged communities already disproportionally impacted by air pollution as are those in C&E's census tract, the final design of the Project should include all existing and emerging zero-emission technologies to minimize diesel PM and oxides of nitrogen (NO_x) emissions, as well as the greenhouse gases that contribute to climate change. CARB encourages cities like Moreno Valley and the C&E applicant to implement the measures listed in Attachment A found below to reduce the Project's construction and operational air pollution emissions.

The CARB's Attachment A mentioned above is found below my name, but the C&E's IS/MND fails to address and incorporate CARB's concerns and strongly worded recommendations for warehouses. It is important that C&E's final environmental documents/staff report/conditionsl of approval do not make the same omissions as is very apparent in the current IS/MND by incorporating both the AG's letter and CARB's Attachment A into the C&E warehouse final project….otherwise it will be inadequate and harmful to both the environment and people.

The California Air Resources Board (CARB) provided Attachment A found below my name to the city on the Moreno Valley Trade Center (MVTC), the Heacock Commerce Center (HCC), The city therefore had this knowledge during the processing of the C&E's application and failed to apply it up to this point.

There is no excuse for the city not to apply/require that which is contained in CARB's Attachment A from day one on this project and the Sierra Club expects to see them in the final project prior to final approval. We, however, have serious concern that any comments made by the public and agencies will be dealt with seriously and incorporated into the project because the city is pushing for approval in less than 30 days. The City issued the 20 day notice on February 9th for the C&E's Initial Study/Mitigated Negative Declaration (IS/MND) with comments due Wednesday March 1st and final approval before the Planning Commission on March 9th.

Please keep me informed of all documents and meetings related to this project.

Sincerely,

George Hague

Sierra Club

Moreno Valley Group

Conservation Chair

ATTACHMENT A

Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers

The California Air Resources Board (CARB) recommends developers and government planners use all existing and emerging zero to near-zero emission technologies during project construction and operation to minimize public exposure to air pollution. Below are some measures, currently recommended by CARB, specific to warehouse and distribution center projects. These recommendations are subject to change as new zero-emission technologies become available.

Recommended Construction Measures

1. Ensure the cleanest possible construction practices and equipment are used. This includes eliminating the idling of diesel-powered equipment and providing the necessary

infrastructure (e.g., electrical hookups) to support zero and near-zero equipment and tools.
2. Implement, and plan accordingly for, the necessary infrastructure to support the zero and near-zero emission technology vehicles and equipment that will be operating on site. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, on-site vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.
3. In construction contracts, include language that requires all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits, such that, emission reductions achieved equal or exceed that of a Tier 4 engine.
4. In construction contracts, include language that requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during project construction be battery powered.
5. In construction contracts, include language that requires all heavy-duty trucks entering the construction site, during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-oxides of nitrogen (NO_x) standard starting in the year 2022.[1]

[1] In 2013, CARB adopted optional low-NO_x emission standards for on-road heavy-duty engines. CARB encourages engine manufacturers to introduce new technologies to reduce NO_x emissions below the current mandatory on-road heavy-duty diesel engine emission standards for model year 2010 and later. CARB's optional low-NO_x emission standard is available at: https://www.arb.ca.gov/msprog/onroad/optionnox/optionnox.htm.

Attachment - 1

6. In construction contracts, include language that requires all construction equipment and fleets to be in compliance with all current air quality regulations. CARB is available to assist in implementing this recommendation.

Recommended Operation Measures

6. Include contractual language in tenant lease agreements that requires tenants to use the cleanest technologies available, and to provide the necessary infrastructure to support zero-emission vehicles and equipment that will be operating on site.
7. Include contractual language intenant lease agreements that requires all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units. This requirement will substantially decrease the amount of time that a TRU powered by a fossil-fueled internal combustion engine can operate at the project site. Use of zero-emission all-electric plug-in TRUs, hydrogen fuel cell transport refrigeration, and cryogenic transport refrigeration are encouraged and can also be included in lease agreements.[2]
8. Include contractual language in tenant lease agreements that requires all TRUs entering the project site be plug-in capable.
9. Include contractual language in tenant lease agreements that requires future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans.
10. Include contractual language in tenant lease agreements requiring all TRUs, trucks, and cars entering the Project site be zero-emission.

11. Include contractual language intenant lease agreements that requires all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the project site to be zero-emission. This equipment is widely available.
12. Include contractual language in tenant lease agreements that requires all heavy-duty trucks entering or on the project site to be model year 2014 or later, expedite a transition to zero-emission vehicles, and be fully zero-emission beginning in 2030.

[2.] CARB's Technology Assessment for Transport Refrigerators provides information on the current and projected development of TRUs, including current and anticipated costs. The assessment is available at: https://www.arb.ca.gov/msprog/tech/techreport/tru_07292015.pdf.

Attachment - 2

8. Include contractual language in tenant lease agreements that requires the tenant be in, and monitor compliance with, all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation,[3] Periodic Smoke Inspection Program (PSIP),[4] and the Statewide Truck and Bus Regulation.[5]
9. Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than 5 minutes while on site.

10. Include contractual language in tenant lease agreements that limits on-site TRU diesel engine runtime to no longer than 15 minutes. If no cold storage operations are planned, include contractual language and permit conditions that prohibit cold storage operations unless a health risk assessment is conducted, and the health impacts fully mitigated.

11. Include rooftop solar panels for each proposed warehouse to the extent feasible, with a capacity that matches the maximum allowed for distributed solar connections to the grid.

[3.] In December 2008, CARB adopted a regulation to reduce greenhouse gas emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation is available at: https://www.arb.ca.gov/cc/hdghg/hdghg.htm.

[4.] The PSIP program requires that diesel and bus fleet owners conduct annual smoke opacity inspections of their vehicles and repair those with excessive smoke emissions to ensure compliance. CARB's PSIP program is available at: https://www.arb.ca.gov/enf/hdvip/hdvip.htm.

[5.] The regulation requires that newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. CARB's Statewide Truck and Bus Regulation is available at: https://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.

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February 27, 2023

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VIA EMAIL TO:
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SUBJECT: COMMENTS ON COTTONWOOD AND EDGEMONT MND (SCH NO. 2023020234)

Dear Ms. Descoteaux:

Thank you for the opportunity to comment on the Mitigated Negative Declaration (MND) for the proposed Cottonwood and Edgemont Warehouse Project. Please accept and consider these comments on behalf of Golden State Environmental Justice Alliance. Also, Golden State Environmental Justice Alliance formally requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

1.0 Summary

The project proposes the construction and operation of two (2) light industrial buildings with a total combined building floor area of 99,630 square feet (s.f.) on an approximately 7.94-gross-acre property (6.88 net acres). Each proposed building will be a total of 49,815 s.f., comprised of 45,815 s.f. of warehousing space and 4,000 s.f. of office space. Each building includes 52 passenger vehicle parking spaces. Building 1 includes 17 truck/trailer parking spaces and Building 2 includes 9 truck/trailer parking spaces.

3.0 Air Quality

Please refer to attachments from SWAPE for a complete technical commentary and analysis.

The MND does not include for analysis relevant environmental justice issues in reviewing potential impacts, including cumulative impacts from the proposed project. This is especially

significant as the surrounding community is highly burdened by pollution. According to CalEnviroScreen 4.0[1], CalEPA's screening tool that ranks each census tract in the state for pollution and socioeconomic vulnerability, the proposed project's census tract (6065042505) ranks worse than 99% of the rest of the state overall in overall pollution burden. The surrounding community, including residences immediately adjacent (shares property line with the project site) to the north and south, Edgemont Elementary School to the north, and additional residences to the east, bears the impact of multiple sources of pollution and is more polluted than other census tracts in many pollution indicators measured by CalEnviroScreen. For example, the project census tract ranks in the 99th percentile for ozone burden, 64th percentile for particulate matter (PM) 2.5 burden, 64th percentile for diesel PM burden, and 84th percentile for traffic burdens. All of these environmental factors are typically attributed to heavy truck activity in the area. Ozone can cause lung irritation, inflammation, and worsening of existing chronic health conditions, even at low levels of exposure[2]. The very small particles of diesel PM can reach deep into the lung, where they can contribute to a range of health problems. These include irritation to the eyes, throat and nose, heart and lung disease, and lung cancer[3].

The census tract also bears more impacts from cleanup sites than 83% of the state. Chemicals in the buildings, soil, or water at cleanup sites can move into nearby communities through the air or movement of water[4].
The census tract also ranks in the 80th percentile for impacts from toxic releases. People living near facilities that emit toxic releases may breathe contaminated air regularly or if contaminants are released during an accident[5].

The census tract also ranks in the 67th percentile for solid waste facility impacts and 57th percentile for hazardous waste facility impacts. Solid waste facilities can expose people to hazardous chemicals, release toxic gases into the air (even after these facilites are closed), and chemicals can leach into soil around the facility and pose a health risk to nearby populations[6]. Hazardous waste generators and facilities contribute to the contamination of air, water and soil near waste generators and facilities can harm the environment as well as people[7].

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[1] CalEnviroScreen 4.0 https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40
[2] OEHHA Ozone https://oehha.ca.gov/calenviroscreen/indicator/air-quality-ozone
[3] OEHHA Diesel Particulate Matter https://oehha.ca.gov/calenviroscreen/indicator/diesel-particulate-matter
[4] OEHHA Cleanup Sites https://oehha.ca.gov/calenviroscreen/indicator/cleanup-sites
[5] OEHHA Toxic Releases https://oehha.ca.gov/calenviroscreen/indicator/toxic-releases-facilities
[6] OEHHA Solid Waste Facilities https://oehha.ca.gov/calenviroscreen/indicator/solid-waste-sites-and-facilities
[7] OEHHA Hazardous Waste Generators and Facilities https://oehha.ca.gov/calenviroscreen/indicator/hazardous-waste-generators-and-facilities

Further, the census tract is a diverse community including 82% Hispanic and 10% African-American residents, whom are especially vulnerable to the impacts of pollution. The community has a high rate of low educational attainment, meaning 94% of the census tract over age 25 has not attained a high school diploma. The community also has a high rate of poverty, meaning 98% of the households in the census tract have a total income before taxes that is less than the poverty level. Income can affect health when people cannot afford healthy living and working conditions, nutritious food and necessary medical care[8]. Poor communities are often located in areas with high levels of pollution[9]. Poverty can cause stress that weakens the immune system and causes people to become ill from pollution[10]. Living in poverty is also an indication that residents may lack health insurance or access to medical care. Medical care is vital for this census tract as it ranks in the 85th percentile for incidence of cardiovascular disease and 69th percentile for incidence of asthma. The community also has a high rate of linguistic isolation, meaning 79% of the census tract speaks little to no English and faces further inequities as a result.

Additionally, the proposed project's census tract (6065042505) and the census tracts adjacent to the project site (6065046700 (south) and 6065042506 (east)) are identified as SB 535 Disadvantaged Communities[11]. This indicates that cumulative impacts of development and environmental impacts in the City are disproportionately impacting these communities. The MND does not discuss that the project site and surrounding area are disadvantaged communities and does not utilize this information in its analysis. The MND has not considered the environmental impacts in relation to the SB 535 status of the project census tract and surrounding area. The negative environmental, health, and quality of life impacts of the warehousing and logistics industry in Moreno Valley have become distinctly inequitable. The severity of environmental impacts particularly on these Disadvantaged Communities must be included for analysis as part of an EIR.

California s Building Energy Code Compliance Software (CBECC) is the State's only approved energy compliance modeling software for non-residential buildings in compliance with Title 24[12]. CalEEMod is not listed as an approved software. The CalEEMod-based modeling in the MND and appendices does not comply with the 2022 Building Energy Efficiency Standards and under-reports the project s significant Energy impacts and fuel consumption to the public and decision makers. Since the MND did not accurately or adequately model the energy impacts in compliance with Title 24, a finding of significance must be made. An EIR with modeling using the approved

[8] OEHHA Poverty https://oehha.ca.gov/calenviroscreen/indicator/poverty
[9] Ibid.
[10] Ibid.
[11] OEHHA SB 535 Census Tracts https://oehha.ca.gov/calenviroscreen/sb535
[12] California Energy Commission 2022 Energy Code Compliance Software https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-1

software (CBECC) must be circulated for public review in order to adequately analyze the project s significant environmental impacts. This is vital as the MND utilizes CalEEMod as a source in its methodology and analysis, which is clearly not the approved software.

4.0 Hazards and Hazardous Materials

The proposed project site is within March Air Reserve Base (MARB)/Inland Port Airport Inner Approach/Departure Zone (Compatibility Zone B1) and the Primary Approach/Departure Zone (Compatibility Zone C1). The MND excludes that the project site is also within Accident Potential Zone II (APZ II). An EIR must be prepared to include this information for analysis in order to provide an adequate and accurate environmental analysis.

The MND provides a very brief statement that "non-sensitive uses – like the light industrial use proposed by the Project – are allowed within Zones B1 and C1 subject to density restrictions. The Project would be consistent with the density restrictions of the ALUCP," and concludes that the project will have less than significant impacts. The MND has not provided any supporting evidence to substantiate these claims, such as including the density restrictions of the MARB/IPA ALUCP and demonstrating how the project complies with them.

Further, Moreno Valley Municipal Code Section 9.07.060 - Airport Land Use Compatibility Plan[13] subsection (F) states that "other types of land use actions are subject to review under the circumstances described in Section 1.5 of Chapter 2 Countywide Policies of the Riverside County airport land use compatibility plan." Section 1.5.3: Major Land Use Actions within RCALUC Chapter 2 - Countywide Policies[14] states that ALUC review of the following actions are required to be reviewed:

"Section 1.5.3: Major Land Use Actions

A) Actions affecting land uses within any compatibility zone.

(5) Any discretionary development proposal for projects having a building floor area of 20,000 square feet or greater unless only ministerial approval (e.g., a building permit) is required.

(9) Proposals for new development (including buildings, antennas, and other structures) having a height of more than: 35 feet within Compatibility Zone B1, B2, or a Height Review Overlay Zone;

[13] Moreno Valley Municipal Code Section 9.07.060
https://library.qcode.us/lib/moreno_valley_ca/pub/municipal_code/item/title_9-chapter_9_07-article_i-9_07_060

[14] RCALUC Chapter 2 - Countywide Policies
https://www.rcaluc.org/Portals/13/PDFGeneral/plan/newplan/04-%20Vol.%201%20County%20wide%20Policies.pdf

(d) Any other proposed land use action, as determined by the local planning agency, involving a question of compatibility with airport activities."

Regarding Section 1.5.3(a), the proposed project is subject to RCALUC review due to the size of its building floor area (requirement 5) and height of 41 feet (requirement 9). Further, regarding Section 1.5.3(d), the proposed project is subject to RCALUC review due to Moreno Valley Municipal Code Section 9.07.060(H)(5)(c) that states, "Where a discretionary action is proposed within an APZ, or Clear Zone, the Department of the Air Force, 452d Air Mobility Wing (AFRC) March Air Reserve Base shall be consulted to determine whether the proposed discretionary action is consistent with the Air Force guidance referenced above. Such consultation would be in addition to, and shall not be in lieu of, requirements of the March ALUCP, or any review for airport land use compatibility that may be required by the Riverside County ALUC." The proposed project is within APZ II and and requires consultation with the Department of the Air Force. Therefore, there is an inherent question of compatibility with airport activities. Notably, the MND has not provided any information regarding consultation with the Department of the Air Force. An EIR must be prepared to provide this information for analysis in order to provide an adequate and accurate environmental analysis. Delaying this review until after the CEQA process is implementation of the project prior to CEQA review and deferred mitigation in violation of CEQA. An EIR must be prepared that includes a review and comment letter regarding the proposed development plans from the Department of the Air Force and RCALUC.

6.0 Land Use and Planning

The MND does not provide a consistency analysis with the Municipal Code. As stated above, the project is not consistent with Moreno Valley Municipal Code Section 9.07.060 and has not demonstrated consistency with the MARB/IPA ALUCP. An EIR must be prepared with this information for analysis in order to provide an adequate and accurate environmental analysis.

The MND does not include a consistency analysis with any land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect, such as the General Plan. The MND is inadequate as an informational document and an EIR must be prepared with a consistency analysis with all General Plan policies, including the following:

LCC.1-8: Promote a land and resource efficient development pattern in order to support efficient delivery of public services and infrastructure, conserve open space lands surrounding the city, reduce vehicle trip lengths and improve air quality.

LCC.1-12: Balance levels of employment and housing within the community to provide more opportunities for Moreno Valley residents to work locally, cut commute times, and improve air quality.

C.2-6: Wherever possible, minimize the frequency of access points along streets by the consolidation of access points between adjacent properties on all circulation element streets, excluding collectors.

C.3-1: Strive to maintain Level of Service (LOS) C" on roadway links, wherever possible, and LOS D" in the vicinity of SR 60 and high employment centers. Strive to maintain LOS D" at intersections during peak hours.

C.3-3: Where new developments would increase traffic flows beyond the LOS C (or LOS D, where applicable), require appropriate and feasible improvement measures as a condition of approval. Such measures may include extra right-ofway and improvements to accommodate additional left-turn and right-turn lanes at intersections, or other improvements.

C.3-4: Require development projects to complete traffic impact studies that conduct vehicle miles traveled analysis and level of service assessment as appropriate per traffic impact study guidelines.

C.5-1: Work to reduce VMT through land use planning, enhanced transit access, localized attractions, and access to nonautomotive modes.

Goal EJ-1: Reduce pollution exposure and improve community health.

EJ.1-3: Require new development that would locate sensitive uses adjacent to sources of toxic air contaminants (TAC) to be designed to minimize any potential health risks, consistent with State law.

Providing a complete consistency/inconsistency analysis is vital as the project is immediately adjacent to residential properties in a SB35 designated Disadvantaged Community.

The MND also states that the project "the Project would not conflict with any applicable goals, objectives, and policies of the SCAQMD s AQMP, SCAG s Connect SoCal 2020-2045 RTP/SCS, and SCAG s Regional Comprehensive Plan," resulting in less than significant impacts. However, the MND does not provide any meaningful supporting evidence or consistency analysis with SCAG's 2020-2045 Connect SoCal RTP/SCS to support this conclusion, in violation of CEQA's requirements for meaningful disclosure (CEQA § 21003(b)). Due to errors in modeling and modeling without supporting evidence, as noted throughout this comment letter, the proposed project has signifiant potential for inconsistency with Goal 5 to reduce greenhouse gas emissions and improve air quality, Goal 6 to support healthy and equitable communities, and Goal 7 to adapt to a changing climate. An EIR must be prepared to include an analysis with the 2020-2045 RTP/SCS Connect SoCal document.

14.0 Population and Housing

The MND utilizes uncertain language and does not provide any meaningful analysis or supporting evidence to substantiate the conclusion that there will be no significant impact to population and housing. The MND states that "it is *anticipated* that the employment base for both the construction and operational phases of the Project would come from the existing population in the Inland Empire, which comprises western Riverside County and southwestern San Bernardino County." Relying on the workforce population of the entire Inland Empire region will increase project related VMT. The MND does not provide a calculation of jobs created by the project during construction or operations.

The MND has not provided any calculation of the jobs generated by the project or evidence that the Inland Empire region's workforce population is qualified for or interested in work in the industrial sector. SCAG's Employment Density Study[15] provides the following applicable employment generation rates for Riverside County:

Warehouse: 1 employee per 581 square feet
Office: 1 employee per 481 square feet

Applying these ratios results in the following calculation:

Warehouse: 91,630 sf/581 = 158
Office: 8,000 sf / 481 sf = 17
Total: 175 employees

Utilizing SCAG s Employment Density Study ratios, the proposed project will generate 175 employees. The MND utilizes uncertain and misleading language which does not provide any meaningful analysis of the project s population and employment generation. In order to comply with CEQA s requirements for meaningful disclosure, an EIR must be prepared to provide an accurate estimate of employees generated by all uses of the proposed project. It must also provide demographic and geographic information on the location of qualified workers to fill these positions.

Additionally, the MND concludes that the "*region* already contains an ample supply of potential employees under existing conditions and the Project s labor demand is not *expected* to draw

[15] SCAG Employment Density Study
http://www.mwcog.org/file.aspx?A=QTTlTR24POOOUIw5mPNzK8F4d8djdJe4LF9Exj6lXOU%3D

substantial numbers of new residents to the area" without providing any meaningful evidence to support this claim, such as the current number of residents or the anticipated increase in residents generated by approved projects or cumulative projects in the pipeline. The analysis must provide meaningful evidence to support the conclusion that the project will not induce unplanned indirect or direct population growth.

SCAG's Connect SoCal Demographics and Growth Forecast[16] notes that the City will add 29,400 jobs between 2016 - 2045. Utilizing SCAG's Employment Density Study calculation of 175 employees, the project represents 0.59% of the City s employment growth from 2016 - 2045. An EIR must be prepared to include this analysis, and also provide a cumulative analysis discussion of projects approved since 2016 and projects "in the pipeline" to determine if the project will exceed SCAG's employment growth forecast for the City. For example, other recent industrial projects such as Old 215 Business Park (345 employees), Compass Danbe Centerpointe Warehouse (677 employees), and World Logistics Center (20,300 direct jobs plus 7,386 indirect/induced jobs in the County (3,693 jobs induced within City) total jobs in city = 23,993), combined with the proposed project will cumulatively generate 25,190 employees, which is 85% of the City's employment growth forecast over 29 years accounted for by only four recent industrial projects. This number increases exponentially when the City s commercial development activity is added to the calculation. An EIR must be prepared to include a cumulative analysis on this topic.

17.0 Transportation

The project's VMT impacts are misrepresented by the WRCOG VMT modeling. The MND relies upon a VMT screening analysis which concludes that the proposed project site is located in a low VMT-generating Traffic Analysis Zone (TAZ) which results in less than significant Transportation impacts. The VMT Appendix C states the project is located in TAZ ID 3,670 (WRCOG VMT Modeling Program notes it is TAZ ID 1228), which is bound by Eucalyptus Ave. to the north, Day St. to the west, Alessandro Blvd. to the south, and 215 Frontage Road to the east. The TAZ is mostly comprised of primarily vacant land and underdeveloped properties with other low-density residential development and a few commercial properties. The proposed project is unique in that the TAZ in which the Project site is located does not contain any other operational warehouse buildings and is at least 50% vacant land. The VMT screening analysis does not adequately or accurately represent the VMT impacts of the proposed project and an EIR must be prepared with a project-specific VMT analysis. The operational nature of industrial/warehouse uses involves high rates of truck/trailer VMT due to traveling from large regional distribution

[16] SCAG Connect SoCal Demographics and Growth Forecast adopted September 3, 2020 https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579

centers to smaller industrial parks (such as the proposed project) and then to their final delivery destinations.

Additionally, Table 4.2 Trip Summary of the Air Quality Appendix CalEEMod output sheets indicates that the project will generate approximately 1,627,311 annual VMT (1,627,311 / 365 days = 4,458 daily total VMT). This is exponentially higher than the VMTs reported in the Appendix. Notably, the VMT analysis states that the project TAZ VMT is 10.21 VMT per employee, which is lower than the Citywide employment-based VMT of 11.01 VMT per employee. This is a negligible difference 0.80 miles traveled. Fehr and Peer's WRCOG SB 743 Implementation Pathway Document Package[17] states that the Governor's Office of Planning and Research (OPR) "recommends that a per capita or per employee VMT that is fifteen percent below that of existing development" is a reasonable threshold to determine that a project would have a less than significant VMT impact. The MND's 0.80 mile reduction is a 7.26% reduction in VMT compared to the Citywide daily average VMT, which does not meet the OPR threshold of a 15% reduction in existing VMT because it is only a 7.08% reduction. Additionally, the MND is internally inconsistent as the Transportation analysis relies on a low VMT area to conclude impacts will be less than significant while the Population and Housing analysis relies on the workforce of the entire Inland Empire region to fill its jobs, which will exponentially increase project generated VMT.

An EIR must be prepared with a project-specific VMT analysis that includes a quantified VMT analysis with all truck/trailer and delivery van activity to adequately and accurately analyze the potentially significant project transportation impacts. Including truck/trailer and delivery van VMT for analysis of industrial projects is vital as these trips are unable to be diverted to other modes of transportation (walking, biking, public transit, etc.).

The MND has not adequately analyzed the project's potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses; or the project's potential to result in inadequate emergency access. The MND has not provided any exhibits depicting the available truck/trailer turning radius at the intersection of the project driveways to determine if there is enough space available to accommodate heavy truck maneuvering. There are no exhibits depicting the available space onsite throughout the project site to accommodate heavy truck maneuvering. There are also no exhibits depicting emergency vehicle access. Deferring this environmental analysis required by CEQA to the construction permitting phase is improper mitigation and does not comply with CEQA's requirement for meaningful disclosure and adequate informational documents. An EIR must be prepared for the

[17] WRCOG SB 743 Implementation Pathway Document Package https://www.fehrandpeers.com/wp-content/uploads/2019/12/WRCOG-SB743-Document-Package.pdf

proposed project with this analysis in order to provide an adequate and accurate environmental analysis.

21.0 Mandatory Findings of Significance

An EIR must be prepared to include a cumulative analysis discussion here to demonstrate the impact of the proposed project in a cumulative setting. For example, SCAG's Connect SoCal Demographics and Growth Forecast notes that the City will add 29,400 jobs between 2016 - 2045. Other recent industrial projects such as Old 215 Business Park (345 employees), Compass Danbe Centerpointe Warehouse (677 employees), and World Logistics Center (20,300 direct jobs plus 7,386 indirect/induced jobs in the County (3,693 jobs induced within City) total jobs in city = 23,993), combined with the proposed project will cumulatively generate 25,190 employees, which is 85% of the City's employment growth forecast over 29 years accounted for by only four recent industrial projects. This number increases exponentially when the City s commercial development activity is added to the calculation. An EIR must be prepared to include this information for analysis and also include a cumulative development analysis of projects approved since 2016 and projects "in the pipeline" to determine if the proposed project exceeds the General Plan growth estimates and/or SCAG's growth forecasts for cumulative analysis. Further, the project has not demonstrated compliance with Municipal Code Section 9.07.060 and the MARB/IPA ALUCP, and this information is not included for analysis here either.

Conclusion

For the foregoing reasons, GSEJA believes the MND is flawed and an EIR must be prepared for the proposed project and circulated for public review. Golden State Environmental Justice Alliance requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

Sincerely,

Gary Ho
Blum, Collins & Ho LLP

Attachment: SWAPE Analysis

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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February 27, 2023

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Subject: Comments on the Cottonwood and Edgemont Project (SCH No. 2023020234)

Dear Mr. Ho,

We have reviewed the February 2023 Initial Study and Mitigated Negative Declaration ("IS/MND") for the Cottonwood and Edgemont Project ("Project") located in the City of Moreno Valley ("City"). The Project proposes to construct 99,360-square-feet ("SF") of industrial space, 4,000-SF of office space, and 130 parking spaces on the 6.88-acre site.

Our review concludes that the IS/MND fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An Environmental Impact Report ("EIR") should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The IS/MND's air quality analysis relies on emissions calculated with California Emissions Estimator Model ("CalEEMod") Version 2020.4.0 (p. 39). [1] CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental

[1] "CalEEMod Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* http://www.aqmd.gov/caleemod/download-model.

Quality Act ("CEQA") requires that such changes be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in the Air Quality Impact Analysis ("AQIA") and the Greenhouse Gas Analysis ("GHG Analysis") as Appendix A1 and Appendix G to the IS/MND, respectively, we found that several model inputs are not consistent with information disclosed in the IS/MND. As a result, the Project's construction and operational emissions may be underestimated. An updated EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Unsubstantiated Reductions to Architectural Coating Emission Factors

Review of the CalEEMod output files demonstrates that the "Cottonwood & Edgemont (Construction – Unmitigated)" model includes reductions to the default architectural coating emission factors (see excerpt below) (Appendix A1, pp. 123, 149; Appendix G, pp. 76).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00

As demonstrated above, the nonresidential exterior and interior architectural coating emission factors are reduced from the default values of 100- to 50-grams per liter ("g/L"). As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[2] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

> "Rule 1113" (Appendix A1, pp. 123, 149; Appendix G, pp. 76).

Furthermore, regarding the rules and regulations that would apply to the proposed project, the AQIA states:

> "SCAQMD RULE 1113 This rule serves to limit the Volatile Organic Compound (VOC) content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects […]
>
> Although the Project would comply with the above regulatory requirements, it should be noted that emission reductions associated with Rules 401, 402, 1301, and 2305 cannot be quantified in the California Emissions Estimator Model (CalEEMod) and are therefore not reflected in the emissions presented herein. Conversely, Rule 403 (Fugitive Dust) (2) and Rule 1113

[2] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.

(Architectural Coatings) (3) can be modeled in CalEEMod. As such, credit for Rule 403 and Rule 1113 have been taken in the analysis." (p. 2, 3).

However, these reductions remain unsubstantiated, as we cannot verify the accuracy of the revised architectural coating emission factors based on SCAQMD Rule 1113 alone. The SCAQMD Rule 1113 Table of Standards provides the required VOC limits (grams of VOC per liter of coating) for 57 different coating categories.[3] The VOC limits for each coating varies from a minimum value of 50 g/L to a maximum value of 730 g/L. As such, we cannot verify that SCAQMD Rule 1113 substantiates reductions to the default coating values without more information regarding what category of coating will be used. As the IS/MND fails to explicitly require the use of a specific type of coating which would adhere to a specific VOC limit, we are unable to verify the model's revised architectural coating emission factors.

These unsubstantiated reductions present an issue, as CalEEMod uses the architectural coating emission factors to calculate the Project's reactive organic gas/volatile organic compound ("ROG"/"VOC") emissions.[4] By including unsubstantiated reductions to the default architectural coating emission factors, the model may underestimate the Project's construction-related ROG/VOC emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Individual Construction Phase Lengths

Review of the CalEEMod output files demonstrates that the "Cottonwood & Edgemont (Construction – Unmitigated)" model includes several changes to the default individual construction phase lengths (see excerpt below) (Appendix A1, pp. 123, 149; Appendix G, pp. 76).

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	20.00	23.00
tblConstructionPhase	NumDays	230.00	130.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	20.00	10.00

As a result of these changes, the model includes the following construction schedule (see excerpt below) (Appendix A2, pp. 129, 155; Appendix G, pp. 82, 83).

[3] SCAQMD Rule 1113 Advisory Notice." SCAQMD, February 2016, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24, p. 1113-14, Table of Standards 1.
[4] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 35, 40.

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	Site Preparation	Site Preparation	2/1/2023	2/28/2023	5	20
2	Grading	Grading	3/1/2023	3/31/2023	5	23
3	Building Construction	Building Construction	4/1/2023	9/29/2023	5	130
4	Paving	Paving	9/30/2023	10/13/2023	5	10
5	Architectural Coating	Architectural Coating	10/14/2023	10/27/2023	5	10

As demonstrated above, the site preparation phase is increased by 100%, from the default value of 10 to 20 days; the grading phase is increased by 15%, from the default value of 20 to 23 days; the building construction phase is decreased by 43%, from the default value of 230 to 130 days; and the paving and architectural coating phases are each decreased by 50%, from their default values of 20 to 10 days. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[5] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

> "Construction schedule based on information provided by the Project Applicant" (Appendix A1, pp. 122, 148; Appendix G, pp. 75).

Additionally, regarding the Project's anticipated construction schedule, the IS/MND states:

> "Based on information provided by the Project Applicant, the Project is anticipated to be constructed over a period of approximately 193 workdays (8 months)" (p. 6).

Furthermore, the IS/MND provides the following table (see excerpt below) (p. 6).

Table 1 Estimated Construction Schedule

Construction Activity	Start Date	End Date	Days
Site Preparation	02/01/2023	02/28/2023	20
Grading	03/01/2023	03/31/2023	23
Building Construction	04/01/2023	09/29/2023	130
Paving	10/02/2023	10/13/2023	10
Architectural Coating	10/14/2023	10/27/2023	10

Source: (Urban Crossroads, 2022c, Table 3-1)

However, the changes to the induvial construction phase lengths remain unsubstantiated. While the IS/MND states that the total length of Project construction would be 8 months, the IS/MND fails to provide an adequate source for the induvial construction phase lengths. As presented in Table 1, the source for the above-mentioned construction schedule is the CalEEMod output files themselves (p. 6). This is incorrect, as the Project documents should substantiate the changes included in the CalEEMod

[5] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.

model, not vice versa.[6] As the IS/MND fails to provide an adequate source for the revised construction phase lengths, we cannot verify the changes. Until a proper source is provided, the model should have included proportionately altered individual phase lengths to match the proposed construction duration of 8 months.[7]

These unsubstantiated changes present an issue, as the construction emissions are improperly spread out over a longer period of time for some phases, but not for others. According to the CalEEMod User's Guide, each construction phase is associated with different emissions activities (see excerpt below).[8]

> *Demolition* involves removing buildings or structures.
>
> *Site Preparation* involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.
>
> *Grading* involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.
>
> *Building Construction* involves the construction of the foundation, structures and buildings.
>
> *Architectural Coating* involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.
>
> *Paving* involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

By disproportionately altering and extending some of the individual construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the construction activities required by the prolonged phases. As a result, there will be less construction activities required per day and, consequently, less pollutants emitted per day. Therefore, the model may underestimate the peak daily emissions associated with some phases of construction and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts

Review of the CalEEMod output files demonstrates that the "Cottonwood & Edgemont (Construction-Unmitigated)" model includes several changes to the off-road construction equipment unit amounts (see excerpt below) (Appendix A1, pp. 124, 150; Appendix G, pp. 77).

[6] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 13, 14.
[7] See Attachment A for proportionally altered construction schedule.
[8] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 32.

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[9] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

> "Equipment based on information provided by the Project Applicant" (Appendix A1, pp. 122, 148; Appendix G, pp. 75).

Furthermore, the IS/MND provides the following construction scenario assumptions (see excerpt below) (p. 7, Table 2):

Table 2 Estimated Construction Equipment Fleet

Construction Activity	Equipment	Amount	Hours Per Day
Site Preparation	Skip Loaders	1	8
	Tractors/Loaders/Backhoes	1	8
Grading	Blade	1	8
	Rubber Tired Dozers	1	8
	Scrapers	4	8
	Tractors/Loaders/Backhoes	1	8
Building Construction	Crane	1	8
	Forklifts	3	8
	Tractors/Loaders/Backhoes	2	8
	Welders	1	8
Paving	Blade	1	8
	Paving Equipment	1	8
	Rollers	2	8
	Skip Loaders	1	8
Architectural Coating	Air Compressors	1	8

Source: (Urban Crossroads, 2022c, Table 3-2)

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9

However, the revisions to the construction off-road equipment unit amounts remain unsupported. As presented in Table 2, the source for the construction equipment unit amounts is the CalEEMod output files themselves. This is incorrect, as the Project documents should substantiate the changes included in the CalEEMod model, not vice versa.[10] As the IS/MND fails to provide an adequate source for the off-road construction equipment unit amounts, we cannot verify the changes.

These unsubstantiated changes present an issue, as CalEEMod uses the off-road equipment unit amounts to calculate the emissions associated with off-road construction equipment.[11] By including unsubstantiated changes to the default off-road construction equipment unit amounts, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Underestimated Number of Operational Saturday and Sunday Vehicle Trips

According to the Trip Generation Assessment ("TA") provided as Appendix K1 to the IS/MND, the Project is expected to generate 438 daily vehicle trips for the General Light Industrial land use and 24 daily vehicle trips for the High-Cube Cold Storage land use (see excerpt below) (p. 3, Table 2).

TABLE 2: PROPOSED PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity Units[1]	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Actual Vehicles:								
General Light Industrial (90%)	89.667 TSF							
Passenger Cars:		58	8	66	8	50	58	414
2-axle Trucks:		0	0	0	0	0	0	4
3-axle Trucks:		0	0	0	0	0	0	6
4+-axle Trucks:		0	0	0	0	0	0	14
Total Truck Trips (Actual Vehicles):		0	0	0	0	0	0	24
Total Trips (Actual Vehicles)[2]		**58**	**8**	**66**	**8**	**50**	**58**	**438**
High-Cube Cold Storage (10%)	9.963 TSF							
Passenger Cars:		1	0	1	0	1	1	14
2-axle Trucks:		0	0	0	0	0	0	4
3-axle Trucks:		0	0	0	0	0	0	2
4+-axle Trucks:		0	0	0	0	0	0	4
Total Truck Trips (Actual Vehicles):		0	0	0	0	0	0	10
Total Trips (Actual Vehicles)[2]		**1**	**0**	**1**	**0**	**1**	**1**	**24**

As such, the Project's models should have included trip rates that reflect the estimated number of average daily vehicle trips. However, review of the CalEEMod output files demonstrates that the "Cottonwood & Edgemont (General Light Industrial Operations)" model includes only 37.05 Saturday and 14.38 Sunday vehicle trips. Furthermore, the "Cottonwood & Edgemont (High-Cube Cold Storage Operations)" model includes only 2.03 Saturday and 0.81 Sunday vehicle trips (see excerpts below) (Appendix A1, pp. 185, 201, 218, 232; Appendix G, pp. 119, 144).

[10] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 13, 14.
[11] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 32

General Light Industrial Operations

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
City Park	0.00	0.00	0.00
General Heavy Industry	414.00	35.02	14.01
Other Asphalt Surfaces	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00
User Defined Industrial	24.00	2.03	0.82
Total	438.01	37.05	14.82

High-Cube Cold Storage

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
Refrigerated Warehouse-No Rail	14.00	1.18	0.47
User Defined Industrial	10.00	0.85	0.34
Total	24.00	2.03	0.81

As demonstrated above, the "Cotton and Edgemont (General Light Industrial Operations)" Saturday and Sunday vehicle trips are underestimated by approximately 401- and 423-trips, respectively.[12, 13] Similarly, the "Cotton and Edgemont (High-Cube Cold Storage Operations)" Saturday and Sunday vehicle trips are underestimated by approximately 22- and 23-trips, respectively.[14, 15] As such, the trip rates inputted into the model are underestimated and inconsistent with the information provided by the TA.

These inconsistencies present an issue, as CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the operational on-road vehicles.[16] By including underestimated operational daily vehicle trips, the model underestimates the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

Incorrect Operational Off-Road Equipment Input Parameters

Review of the CalEEMod output files demonstrates that the "Cottonwood & Edgemont (General Light Industrial Operations)" model includes several changes to the default operational off-road equipment input parameters (see excerpt below) (Appendix A1, pp. 178, 194; Appendix G, pp. 112).

[12] Calculated: 438.01 proposed daily trips – 37.05 modeled Saturday trips = 400.96 underestimated Saturday trips.
[13] Calculated: 438.01 proposed daily trips – 14.82 modeled Sunday trips = 423.19 underestimated Sunday trips.
[14] Calculated: 24 proposed daily trips – 2.03 modeled Saturday trips = 21.97 underestimated Saturday trips.
[15] Calculated: 24 proposed daily trips – 0.81 modeled Sunday trips = 23.19 underestimated Sunday trips.
[16] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 36.

Table Name	Column Name	Default Value	New Value
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	2.00

As a result, the model includes 2 CNG tractors that would each operate for 4 hours per day (see excerpt below) (Appendix A1, pp. 190, 206; Appendix G, pp. 131).

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	2	4.00	365	200	0.37	CNG

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified. [17] According to the "User Entered Comments and Non-Default Data" table, the justification provided for the inclusion of operational off-road equipment is:

> "Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Busniess Survey Results (2014)" (Appendix A1, pp. 176, 192; Appendix G, pp. 110).

However, the revisions the default operational off-road equipment values are incorrect for three reasons.

First, review of the *SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results* demonstrates that the South Coast Air Quality Management District ("SCAQMD") fails to mention or substantiate that operation of off-road equipment is limited to only 4 hours a day. [18] As such, in order to conduct the most conservative analysis, the model should have included the tractors as being operated for 8 hours per day, as assumed by the default CalEEMod values.

Second, according to the IS/MND, the Project is expected to require forklifts as part of the operation fleet:

> "The Project is expected to use outdoor cargo handling equipment (e.g., yard trucks, hostlers, yard goats, pallet jacks, forklifts) that is only powered by non-diesel engines (e.g. gasoline, natural gas, electric)" (p. 6, 7).

[17] "CalEEMod User's Guide Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.
[18] "SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results." SCAQMD, June 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/business-survey-summary.pdf.

As the SCAQMD reported an average of 0.12 forklifts/pallet jacks per 1,000-SF of warehouse building area, the model should have included approximately 12 operational forklifts in addition to the operational tractors.[19,20]

Third, the IS/MND fails to include the use of Compressed Natural Gas ("CNG") fuel as a formal mitigation measure. This is incorrect, as according to the Association of Environmental Professionals' ("AEP") *CEQA Portal Topic Paper* on Mitigation Measures:

> "While not 'mitigation', a good practice is to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP). Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact."[21]

As demonstrated above, design features that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as CNG fuel is not formally included as a mitigation measure in the IS/MND, we cannot guarantee that the use of CNG fuel would be implemented, monitored, and enforced on the Project site.

This incorrect and unsubstantiated changes present an issue, as CalEEMod uses operational off-road equipment to calculate the emissions associated with the Project's area-source operational emissions. [22] By including unsubstantiated input parameters for the Project's operational off-road equipment, failing to include any operational forklifts, and failing to include the use of CNG fuel as a formal mitigation measure, the model may underestimate the Project's area-source operational emissions and should not be relied upon to determine Project significance.

Updated Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to more accurately estimate the Project's construction-related emissions, we prepared an updated CalEEMod model, using Project-specific information provided by the IS/MND. In our updated model, we omitted the unsubstantiated reductions to the architectural coating emission factors and construction off-road equipment units, and proportionately altered the individual construction phase lengths to match the total length of 8 months.[23]

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[19] "SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results." SCAQMD, June 2014, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/business-survey-summary.pdf, p. 9.
[20] Calculated: (99,630-SF / 1,000-SF) * 0.12 = 11.96 forklifts.
[21] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.
[22] "CalEEMod User's Guide Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 42.
[23] See Attachment B for updated air modeling.

Our updated analysis estimates that the Project's construction-related VOC emissions would exceed the applicable South Coast Air Quality Management District ("SCAQMD") threshold of 75-pounds per day ("lbs/day"), as referenced by the AQIA (p. 40, Table 3) (see table below).[24]

SWAPE Criteria Air Pollutant Emissions	
Construction	**VOC** (lbs/day)
AQIA	52.43
SWAPE	89.61
% Increase	71%
SCAQMD Threshold	**75**
Exceeds?	***Yes***

As you can see in the table above, the Project's construction-related VOC emissions, as estimated by SWAPE, increase by approximately 71% and exceed the applicable SCAQMD significance threshold. Thus, our updated model demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the IS/MND. As a result, an EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the surrounding environment.

Disproportionate Health Risk Impacts of Warehouses on Surrounding Communities

Upon review of the IS/MND and associated documents, we have determined that the development of the proposed Project would result in disproportionate health risk impacts on community members living, working, and going to school within the immediate area of the Project site. According to SCAQMD:

> "Those living within a half mile of warehouses are more likely to include communities of color, have health impacts such as higher rates of asthma and heart attacks, and a greater environmental burden."[25]

In particular, the SCAQMD found that more than 2.4 million people live within a half mile radius of at least one warehouse, and that those areas not only experience increased rates of asthma and heart attacks, but are also disproportionately Black and Latino communities below the poverty line.[26] Another study similarly indicates that "neighborhoods with lower household income levels and higher percentages of minorities are expected to have higher probabilities of containing warehousing

[24] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.
[25] "South Coast AQMD Governing Board Adopts Warehouse Indirect Source Rule." SCAQMD, May 2021, *available at:* http://www.aqmd.gov/docs/default-source/news-archive/2021/board-adopts-waisr-may7-2021.pdf?sfvrsn=9.
[26] "Southern California warehouse boom a huge source of pollution. Regulators are fighting back." Los Angeles Times, May 2021, *available at:* https://www.latimes.com/california/story/2021-05-05/air-quality-officials-target-warehouses-bid-to-curb-health-damaging-truck-pollution.

facilities."[27] Additionally, a report authored by the Inland Empire-based People's Collective for Environmental Justice and University of Redlands states:

> "As the warehouse and logistics industry continues to grow and net exponential profits at record rates, more warehouse projects are being approved and constructed in low-income communities of color and serving as a massive source of pollution by attracting thousands of polluting truck trips daily. Diesel trucks emit dangerous levels of nitrogen oxide and particulate matter that cause devastating health impacts including asthma, chronic obstructive pulmonary disease (COPD), cancer, and premature death. As a result, physicians consider these pollution-burdened areas 'diesel death zones.'"[28]

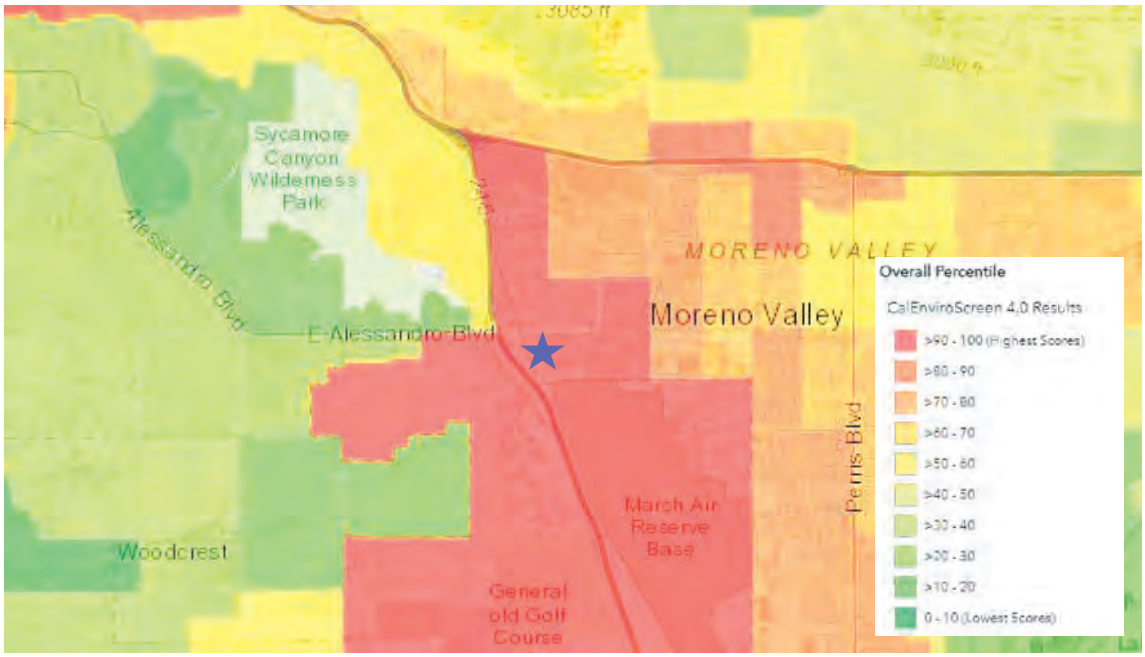
It is evident that the continued development of industrial warehouses within these communities poses a significant environmental justice challenge. However, the acceleration of warehouse development is only increasing despite the consequences on public health.

Moreno Valley, the setting of the proposed Project, bears a disproportionately high pollution burden compared to the rest of California. When using CalEnviroScreen 4.0, the California Environmental Protection Agency's ("CalEPA") screening tool that ranks each census tract in the State for pollution and socioeconomic vulnerability, we found that the Project's census tract is in the 99th percentile of most polluted census tracts in the State (see excerpt below).[29]

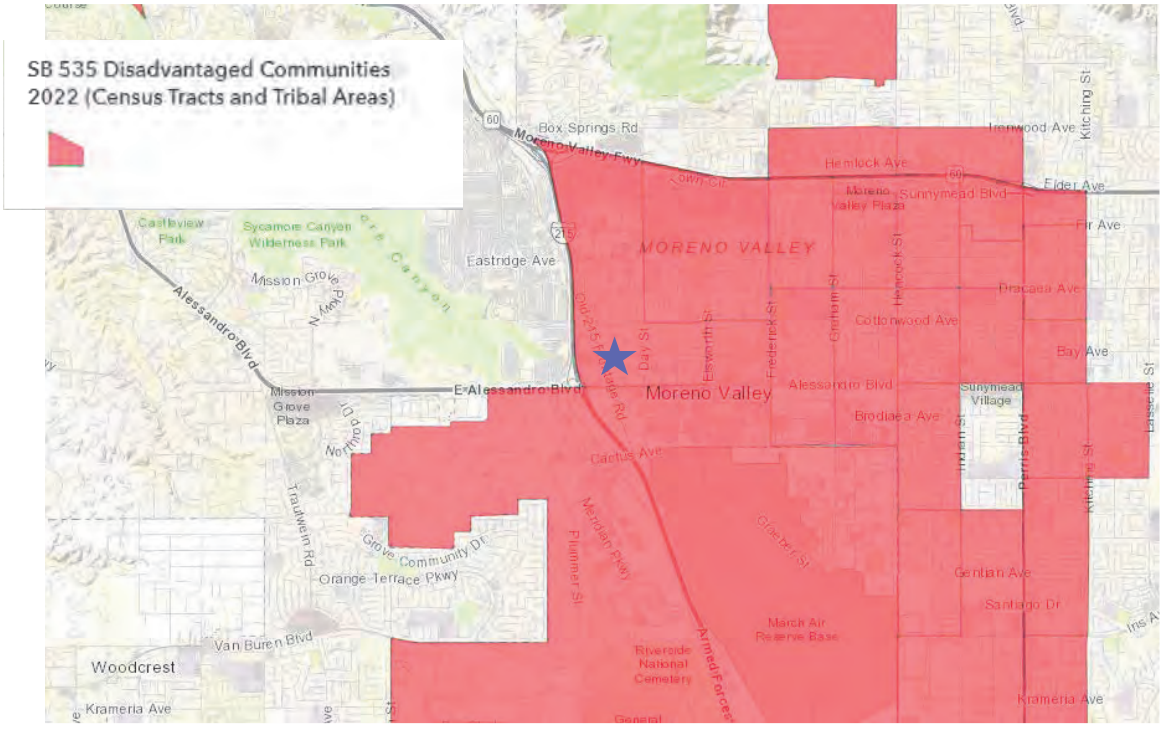
[27] "Location of warehouses and environmental justice: Evidence from four metros in California." Metro Freight Center of Excellence, January 2018, *available at:* https://www.metrans.org/assets/research/MF%201.1g_Location%20of%20warehouses%20and%20environmental%20justice_Final%20Report_021618.pdf, p. 21.

[28] "Warehouses, Pollution, and Social Disparities: An analytical view of the logistics industry's impacts on environmental justice communities across Southern California." People's Collective for Environmental Justice, April 2021, *available at:* https://earthjustice.org/sites/default/files/files/warehouse_research_report_4.15.2021.pdf, p. 4.

[29] "CalEnviroScreen 4.0." California Office of Environmental Health Hazard Assessment (OEHHA), October 2021, *available at:* https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40.



Additionally, according to CalEnviroScreen's SB 535 Disadvantaged Communities Map, the Project site is located in a designated disadvantaged community (see excerpt below).[30]



[30] "SB 535 Disadvantaged Communities (2022 Update)." California Environmental Protection Agency, *available at:* https://experience.arcgis.com/experience/1c21c53da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities/

SB 535 provides funding for development projects that provide a benefit to disadvantaged communities. CalEPA has been given the responsibility for identifying those communities based on "geographic, socioeconomic, public health, and environmental hazard criteria."[31] Therefore, as the Project site is located in a designated disadvantaged community, and Project's census tract already exhibits a high cancer risk, development of the proposed Project would disproportionately contribute to and exacerbate the health conditions of nearby residents.

In April 2022, the American Lung Association ranked Riverside County as the second worst for ozone pollution in the nation.[32] This year, the County continues to face significant ozone pollution, as it has seen the second highest recorded Air Quality Index ("AQI") values for ground-level ozone in California.[33] The U.S. Environmental Protection Agency ("U.S. EPA") indicates that ozone, the main ingredient in "smog," can cause several health problems, which includes aggravating lung diseases and increasing the frequency of asthma attacks. The U.S. EPA states:

> "Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure. Children are also more likely than adults to have asthma."[34]

Furthermore, regarding the increased sensitivity of early-life exposures to inhaled pollutants, the California Air Resources Board ("CARB") states:

> "Children are often at greater risk from inhaled pollutants, due to the following reasons:
>
> - Children have unique activity patterns and behavior. For example, they crawl and play on the ground, amidst dirt and dust that may carry a wide variety of toxicants. They often put their hands, toys, and other items into their mouths, ingesting harmful substances. Compared to adults, children typically spend more time outdoors and are more physically active. Time outdoors coupled with faster breathing during exercise increases children's relative exposure to air pollution.
>
> - Children are physiologically unique. Relative to body size, children eat, breathe, and drink more than adults, and their natural biological defenses are less developed. The protective barrier surrounding the brain is not fully developed, and children's nasal

[31] "Final Designation of Disadvantaged Communities)." California Environmental Protection Agency, *available at:* chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf?emrc=e05e10

[32] "State of the Air 2022." American Lung Association, April 2022, *available at:* https://www.lung.org/research/sota/key-findings/most-polluted-places.

[33] "High Ozone Days." American Lung Association, 2022, *available at:* https://www.lung.org/research/sota/city-rankings/states/california.

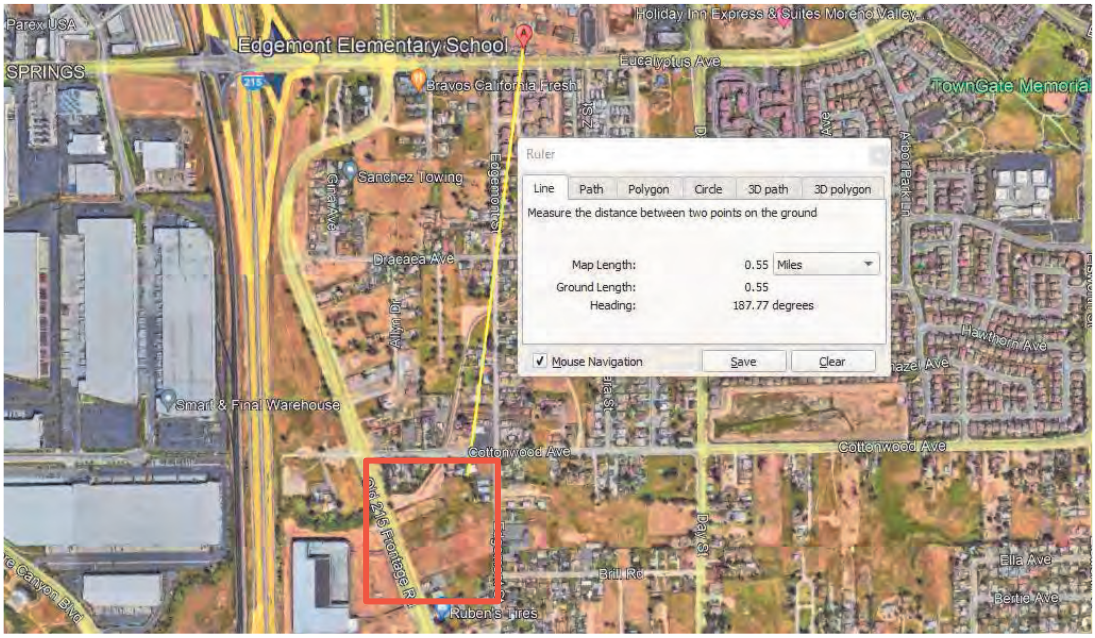
[34] "Health Effects of Ozone Pollution." U.S. EPA, May 2021, *available at:* https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.

passages aren't as effective at filtering out pollutants. Developing lungs, immune, and metabolic systems are also at risk.

- Children are particularly susceptible during development. Environmental exposures during fetal development, the first few years of life, and puberty have the greatest potential to influence later growth and development."[35]

A Stanford-led study also reveals that children exposed to high levels of air pollution are more susceptible to respiratory and cardiovascular diseases in adulthood.[36] Thus, given children's higher propensity to succumb to the negative health impacts of air pollutants, and as warehouses release more smog-forming pollution than any other sector, it is necessary to evaluate the specific health risk that warehouses pose to children in the nearby community.

According to the above-mentioned study by the People's Collective for Environmental Justice and University of Redlands, there are 640 schools in the South Coast Air Basin that are located within half a mile of a large warehouse, most of them in socio-economically disadvantaged areas.[37] Review of Google Earth demonstrates that there is an elementary school approximately half of a mile from the Project site:



[35] "Children and Air Pollution." California Air Resources Board (CARB), *available at:* https://ww2.arb.ca.gov/resources/documents/children-and-air-pollution.

[36] "Air pollution puts children at higher risk of disease in adulthood, according to Stanford researchers and others." Stanford, February 2021, *available at:* https://news.stanford.edu/2021/02/22/air-pollution-impacts-childrens-health/.

[37] "Warehouses, Pollution, and Social Disparities: An analytical view of the logistics industry's impacts on environmental justice communities across Southern California." People's Collective for Environmental Justice, April 2021, *available at:* https://earthjustice.org/sites/default/files/files/warehouse_research_report_4.15.2021.pdf, p. 4.

As demonstrated, Edgemont Elementary School is located approximately 0.55 miles, or 2,904 feet, from the Project site. Therefore, this Project poses a significant threat because, as outlined above, children are a vulnerable population that are more susceptible to the damaging side effects of air pollution. As such, the Project would have detrimental short-term and long-term health impacts on local children if approved.

An EIR should be prepared to evaluate the disproportionate impacts of the proposed warehouse on the community adjacent to the Project, including an analysis of the impact on children and people of color who live and attend school in the surrounding area. Finally, in order to evaluate the cumulative air quality impact from the several warehouse projects proposed or built in a one-mile radius of the Project site, the EIR should prepare a cumulative health risk assessment ("HRA") to quantify the adverse health outcome from the effects of exposure to multiple warehouses in the immediate area in conjunction with the poor ambient air quality in the Project's census tract.

Diesel Particulate Matter Emissions Inadequately Evaluated

The IS/MND conducts a health risk analysis ("HRA") evaluating impacts from exposure to diesel particulate matter ("DPM") emissions during Project construction and operation, as detailed in the Mobile Source Health Risk Assessment ("HRA Report"), provided as Appendix A2 to the IS/MND. Specifically, the HRA Report estimates that the maximum cancer risk posed to nearby, existing residential sensitive receptors as a result of Project construction and operation would be 8.88 in one million (p. 5, Table ES-3).

TABLE ES-3: SUMMARY OF CONSTRUCTION AND OPERATIONAL CANCER AND NON-CANCER RISKS

Time Period	Location	Maximum Lifetime Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold
30 Year Exposure	Maximum Exposed Sensitive Receptor	8.88	10	NO
Time Period	**Location**	**Maximum Hazard Index**	**Significance Threshold**	**Exceeds Significance Threshold**
Annual Average	Maximum Exposed Sensitive Receptor	0.03	1.0	NO

However, the IS/MND's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for three reasons.

First, the IS/MND's construction HRA is incorrect, as it relies upon emissions estimates from a flawed air model, as previously discussed. Specifically, the HRA Report states:

> "The emissions calculations for the construction HRA component are based on an assumed mix of construction equipment and hauling activity as presented in the Cottonwood & Edgemont

> Warehouse Air Quality Impact Analysis ("technical study") prepared by Urban Crossroads, Inc. (5)" (p. 11).

As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the AQIA as Appendix A1 to the IS/MND, we found that several of the values inputted into the model are not consistent with information disclosed in the IS/MND. As a result, the HRA utilizes an underestimated DPM concentration to calculate the health risk associated with Project construction. As such, the HRA Report's construction cancer risk should not be relied upon to determine Project significance.

Second, the IS/MND's HRA may fail to include Age Sensitivity Factors ("ASF"). Regarding ASFs, OEHHA guidance states:

> "Studies have shown that young animals are more sensitive than adult animals to exposure to many carcinogens (OEHHA, 2009). Therefore, OEHHA developed age sensitivity factors (ASFs) to take into account the increased sensitivity to carcinogens during early-in-life exposure (Table 8.3). These factors were developed and described in detail in OEHHA (2009). In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age 2 years, and an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood."

Thus, the HRA Report's equation to produce carcinogenic risk estimates, as shown below, is incorrect and underestimated (p. 22).

$$Risk_{inh} = Dose_{air} \times CPF \times ED/AT \, x \, FAH$$

Instead, the IS/MND should have used the following equation that includes ASFs:

$$Cancer\ Risk_{AIR} = Dose_{AIR} \times CPF \times ASF \times FAH \times \frac{ED}{AT}$$

Thus, by potentially failing to include ASF values in the carcinogenic risk estimate equation, the IS/MND's HRA may underestimate the cancer risk posed to nearby, existing sensitive receptors as a result of Project construction and operation.

Third, the IS/MND's HRA underestimates the Fraction of Time At Home ("FAH") values. Specifically, for calculating construction-related cancer risks, the HRA relies on an FAH value 0.93 for infant (age 0 to 2) receptors. For calculating operational cancer risks, the HRA relies on an FAH value of 0.85 for third trimester (age -0.25 to 0) and infant receptors, and an FAH value of 0.72 for the child receptors (age 2 to 16) (see excerpt below) (Appendix A2, p. 20-21, Table 2-6, Table 2-7).

TABLE 2-6: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (CONSTRUCTION ACTIVITY)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
0 to 2	1,090	10	0.73	0.93	243	8

TABLE 2-7: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK (30 YEAR RESIDENTIAL)

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
-0.25 to 0	361	10	0.25	0.85	350	24
0 to 2	1,090	10	2	0.85	350	24
2 to 16	572	3	14	0.72	350	24
16 to 30	261	1	14	0.73	350	24

However, the FAH values used for the third trimester, infant, and childhood receptors are incorrect, as SCAQMD guidance clearly states:

> "For Tiers 1, 2, and 3 screening purposes, the FAH is assumed to be 1 for ages third trimester to 16. As a default, children are assumed to attend a daycare or school in close proximity to their home and no discount should be taken for time spent outside of the area affected by the facility's emissions. People older than age 16 are assumed to spend only 73 percent of their time at home."[38]

Per SCAQMD guidance, the HRA Report should have used an FAH of 1 for the third trimester, infant, and child receptors. Thus, by utilizing incorrect FAH values, the HRA Report underestimates the cancer risk posed to nearby, existing sensitive receptors as a result of Project construction and operation. As a result, the IS/MND's less-than-significant health risk impact conclusion should not be relied on, and an EIR should be prepared to include an updated HRA relying on correct input parameters.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The IS/MND estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 1,369.19 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year") (p. 58, Table 7).

[38] "Risk Assessment Procedures." SCAQMD, August 2017, available at: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

Table 7 Total Annual Project Greenhouse Gas Emissions

Emission Source	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e
Annual construction-related emissions amortized over 30 years	12.13	2.16E-03	4.77E-04	12.33
Area Source	0.01	3.00E-05	0.00	0.01
Energy Source	412.53	0.02	5.69E-03	414.80
Mobile Source	664.41	0.02	0.05	679.66
TRU Source				12.70
On-Site Equipment	101.50	0.03	0.00	102.32
Waste	24.48	1.45	0.00	60.66
Water Usage	62.37	0.76	0.02	86.70
Total CO_2e (All Sources)	**1,369.19**			

Source: (Urban Crossroads, 2022c) Table 3-6

As a result, the IS/MND concludes:

> "As shown above, the Project will result in approximately 1,369.19 $MTCO_2e$ emissions annually, which would not exceed the significance threshold of 3,000 $MTCO_2e$ per year. Therefore, the Project would not generate substantial GHG emissions – either directly or indirectly – that would have a significant impact on the environment. Impacts would be less than significant" (p. 57).

Furthermore, the IS/MND's analysis relies upon the Project's consistency with the City's Climate Action Plan ("CAP") and the CARB 2017 *Scoping Plan* to conclude that the Project would result in a less-than-significant GHG impact (p. 59). However, the IS/MND's analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for four reasons.

(1) The IS/MND's quantitative analysis relies upon a flawed air model;
(2) The IS/MND's quantitative analysis relies upon an outdated threshold;
(3) The IS/MND's unsubstantiated air model indicates a potentially significant impact; and
(4) The IS/MND fails to consider performance-based standards under CARB's 2017 scoping plan.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 1,369.19 $MTCO_2e$ (p. 58, Table 7). However, the IS/MND quantitative analysis is unsubstantiated. As previously discussed, when reviewing the Project's CalEEMod models, provided in the AQIA and the GHG Analysis as Appendix A1 and Appendix G, respectively, to the IS/MND, we found that several of the values inputted into the models are not consistent with information disclosed in the IS/MND. As a result, the models may underestimate the Project's emissions, and the IS/MND's quantitative analysis should not be relied upon to determine Project significance. An EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the environment.

2) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 1,369.19 $MTCO_2e$, which would not exceed the SCAQMD threshold of 3,000 MT CO_2e/year (p. 58, Table 7). However, the guidance that provided the 3,000 MT CO_2e/year threshold, the SCAQMD's 2008

Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[39] Furthermore, AEP guidance states:

> "[F]or evaluating projects with a post 2020 horizon, the threshold will need to be revised based on a new gap analysis that would examine 17 development and reduction potentials out to the next GHG reduction milestone."[40]

As it is currently February 2023, thresholds for 2020 are not applicable to the proposed Project and should be revised to reflect the current GHG reduction target. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the IS/MND's less-than-significant GHG impact conclusion should not be relied upon. Instead, we recommend that the Project apply the SCAQMD 2035 service population efficiency target of 3.0 MT CO_2e/SP/year, which was calculated by applying a 40% reduction to the 2020 targets.[41]

3) Failure to Identify a Potentially Significant GHG Impact

In an effort to quantitatively evaluate the Project's GHG emissions, we compared the Project's GHG emissions, as estimated by the IS/MND, to the SCAQMD 2035 efficiency target of 3.0 MT CO_2e/SP/year. When applying this threshold, the Project's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.

As previously stated, the IS/MND estimates that the Project would generate net annual GHG emissions of 1,369.19 MTCO_2e (p. 58, Table 7). According to CAPCOA's *CEQA & Climate Change* report, a service population ("SP") is defined as "the sum of the number of residents and the number of jobs supported by the project."[42] According to the Traffic Analysis ("TA"), the project would support 130 employees (Table 4-3, p. 42). As the project is not expected to support any residential land uses, we estimate an SP of 130 people. When dividing the Project's net annual GHG emissions, as estimated by the IS/MND, by an SP of 130 people, we find that the Project would emit approximately 10.5 MT CO_2e/SP/year (see table below).[43]

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[39] "Health & Safety Code 38550." California State Legislature, January 2007, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.

[40] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 39.

[41] "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf, p. 2.

[42] "CEQA & Climate Change." California Air Pollution Control Officers Association (CAPCOA), January 2008, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf, p. 71-72.

[43] Calculated: (1,369.19 MT CO_2e/year) / (130 service population) = (10.5 MT CO_2e/SP/year).

IS/MND Greenhouse Gas Emissions	
Annual Emissions (MT CO_2e/year)	1,369.19
Service Population	130
Service Population Efficiency (MT CO_2e/SP/year)	10.5
SCAQMD 2035 Target	**3.0**
Exceeds?	***Yes***

As demonstrated above, the Project's service population efficiency value exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO_2e/SP/year, indicating a potentially significant impact not previously identified or addressed by the IS/MND. As a result, the IS/MND's less-than-significant GHG impact conclusion should not be relied upon. An EIR should be prepared, including an updated GHG analysis and incorporating additional mitigation measures to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the IS/MND concludes that the Project would be consistent with CARB's 2017 Climate Change Scoping Plan (p. 59). However, this is incorrect, as the IS/MND fails to consider the performance-based measures proposed by CARB.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[44] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[45] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2023 (Project operational year), and 2030 (target years under SB 32) (see table below).

[44] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[45] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," California Air Resources Board (CARB), January 2019, *available at*: https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate; *see also:* https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

2017 Scoping Plan Daily VMT Per Capita						
	Riverside County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	2,196,083	41,086,173	18.71	37,335,085	836,463,980.46	22.40
2023	2,613,313	48,625,180	18.61	41,659,526	924,184,228.61	22.18
2030	2,857,496	50,704,073	17.74	43,939,250	957,178,153.19	21.78

As the IS/MND fails to evaluate the Project's consistency with the performance-based daily VMT per capita projections from CARB's 2017 *Scoping Plan*, the IS/MND's claim that the proposed Project would be consistent with the *Scoping Plan* is unsupported.

Furthermore, as of November 16, 2022, CARB has released an updated scoping plan for achieving carbon neutrality. However, the IS/MND fails to discuss the updated CARB 2022 Scoping plan whatsoever. An EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant air quality and GHG impacts that should be mitigated further. As such, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in the California Department of Justice Warehouse Project Best Practices document.[46] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

- Requiring off-road construction equipment to be hybrid electric-diesel or zero emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.

[46] "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, September 2022, *available at*: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf, p. 8 – 10.

- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Forbidding idling of heavy equipment for more than three minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.
- Requiring all heavy-duty vehicles engaged in drayage to or from the project site to be zero-emission beginning in 2030.
- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.

- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance)
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation.

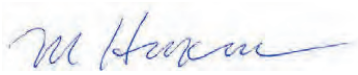
Furthermore, as it is policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045, we emphasize the applicability of incorporating solar power system into the Project design. Until the feasibility of incorporating on-site renewable energy production is considered, the Project should not be approved.

An EIR should be prepared to include all feasible mitigation measures, as well as include updated air quality, health risk, and GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,



Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A: Proportionately Altered Construction Schedule
Attachment B: Updated CalEEMod Output Files
Attachment C: Matt Hagemann CV
Attachment D: Paul Rosenfeld CV

Construction Schedule Calculations					
Phase	Default Phase Length	Construction Duration	%	Construction Duration	Revised Phase Length
Site Preparation	10	419	0.0239	240	6
Grading	20	419	0.0477	240	11
Construction	230	419	0.5489	240	132
Paving	20	419	0.0477	240	11
Architectural Coating	20	419	0.0477	240	11

	Total Default Construction Duration	Revised Construction Duration
Start Date	3/1/2023	2/1/2023
End Date	4/23/2024	9/29/2023
Total Days	419	240

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Annual

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

Cottonwood & Edgemont (Construction - Unmitigated)

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	89.67	1000sqft	2.06	89,667.00	0
Refrigerated Warehouse-No Rail	9.96	1000sqft	0.23	9,963.00	0
Other Asphalt Surfaces	176.40	1000sqft	4.05	176,404.00	0
Parking Lot	130.00	Space	0.81	35,264.00	0
City Park	0.79	Acre	0.79	34,588.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - Consistent with the IS/MND's model.

Construction Phase - See SWAPE's comments on "Unsubstantiated Changes to Individual Construction Phase Lengths"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Annual

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

Trips and VMT - Consistent with the IS/MND's model.

Grading - Left as default

Architectural Coating - See SWAPE's comments on "Unsubstantiated Reductions to Architectural Coating Emission Factors"

Vehicle Trips - Consistent with the IS/MND's model.

Energy Use - Consistent with the IS/MND's model.

Water And Wastewater - Consistent with the IS/MND's model.

Solid Waste - Consistent with the IS/MND's model.

Construction Off-road Equipment Mitigation - Consistent with the IS/MND's model

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	6.00
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	230.00	133.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	11.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24E	0.95	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	3.22	0.00
tblLandUse	LandUseSquareFeet	89,670.00	89,667.00
tblLandUse	LandUseSquareFeet	9,960.00	9,963.00
tblLandUse	LandUseSquareFeet	176,400.00	176,404.00

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

tblLandUse	LandUseSquareFeet	52,000.00	35,264.00
tblLandUse	LandUseSquareFeet	34,412.40	34,588.00
tblLandUse	LotAcreage	1.17	0.81
tblSolidWaste	SolidWasteGenerationRate	0.07	0.00
tblSolidWaste	SolidWasteGenerationRate	111.19	0.00
tblSolidWaste	SolidWasteGenerationRate	9.36	0.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	7.00
tblTripsAndVMT	VendorTripNumber	57.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	18.00	5.00
tblTripsAndVMT	WorkerTripNumber	15.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	13.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

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

tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblWater	IndoorWaterUseRate	20,736,187.50	0.00
tblWater	IndoorWaterUseRate	2,303,250.00	0.00
tblWater	OutdoorWaterUseRate	941,270.27	0.00

2.0 Emissions Summary

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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					
2023	0.6624	1.3239	1.6633	3.6000e-003	0.2279	0.0595	0.2873	0.0848	0.0557	0.1405	0.0000	320.9260	320.9260	0.0512	8.7400e-003	324.8083
Maximum	**0.6624**	**1.3239**	**1.6633**	**3.6000e-003**	**0.2279**	**0.0595**	**0.2873**	**0.0848**	**0.0557**	**0.1405**	**0.0000**	**320.9260**	**320.9260**	**0.0512**	**8.7400e-003**	**324.8083**

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					
2023	0.6624	1.3239	1.6633	3.6000e-003	0.2279	0.0595	0.2873	0.0848	0.0557	0.1405	0.0000	320.9257	320.9257	0.0512	8.7400e-003	324.8081
Maximum	**0.6624**	**1.3239**	**1.6633**	**3.6000e-003**	**0.2279**	**0.0595**	**0.2873**	**0.0848**	**0.0557**	**0.1405**	**0.0000**	**320.9257**	**320.9257**	**0.0512**	**8.7400e-003**	**324.8081**

	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**

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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	2-1-2023	4-30-2023	0.4405	0.4405
2	5-1-2023	7-31-2023	0.5947	0.5947
3	8-1-2023	9-30-2023	0.3884	0.3884
		Highest	0.5947	0.5947

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	0.4236	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0108
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	**0.4236**	**5.0000e-005**	**5.1900e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0108**

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	0.4236	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0108
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	**0.4236**	**5.0000e-005**	**5.1900e-003**	**0.0000**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0108**

	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	3/1/2023	3/8/2023	5	6	
2	Grading	Grading	3/9/2023	3/24/2023	5	12	
3	Building Construction	Building Construction	3/25/2023	9/27/2023	5	133	

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

4	Paving	Paving	9/28/2023	10/12/2023	5	11	
5	Architectural Coating	Architectural Coating	10/13/2023	10/27/2023	5	11	

Acres of Grading (Site Preparation Phase): 9

Acres of Grading (Grading Phase): 12

Acres of Paving: 4.86

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 149,445; Non-Residential Outdoor: 49,815; Striped Parking Area: 12,700 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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

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	7	5.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	145.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	13.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 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	tons/yr										MT/yr					
Fugitive Dust					0.0590	0.0000	0.0590	0.0303	0.0000	0.0303	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9800e-003	0.0826	0.0547	1.1000e-004		3.8000e-003	3.8000e-003		3.4900e-003	3.4900e-003	0.0000	10.0352	10.0352	3.2500e-003	0.0000	10.1164
Total	**7.9800e-003**	**0.0826**	**0.0547**	**1.1000e-004**	**0.0590**	**3.8000e-003**	**0.0628**	**0.0303**	**3.4900e-003**	**0.0338**	**0.0000**	**10.0352**	**10.0352**	**3.2500e-003**	**0.0000**	**10.1164**

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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 - 2023

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	2.0000e-005	6.2000e-004	2.5000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.3029	0.3029	0.0000	4.0000e-005	0.3163
Worker	5.0000e-005	4.0000e-005	4.7000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1270	0.1270	0.0000	0.0000	0.1280
Total	**7.0000e-005**	**6.6000e-004**	**7.2000e-004**	**0.0000**	**2.7000e-004**	**1.0000e-005**	**2.9000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.4298**	**0.4298**	**0.0000**	**4.0000e-005**	**0.4443**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0590	0.0000	0.0590	0.0303	0.0000	0.0303	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.9800e-003	0.0826	0.0547	1.1000e-004		3.8000e-003	3.8000e-003		3.4900e-003	3.4900e-003	0.0000	10.0352	10.0352	3.2500e-003	0.0000	10.1163
Total	**7.9800e-003**	**0.0826**	**0.0547**	**1.1000e-004**	**0.0590**	**3.8000e-003**	**0.0628**	**0.0303**	**3.4900e-003**	**0.0338**	**0.0000**	**10.0352**	**10.0352**	**3.2500e-003**	**0.0000**	**10.1163**

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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 - 2023

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	2.0000e-005	6.2000e-004	2.5000e-004	0.0000	1.1000e-004	1.0000e-005	1.2000e-004	3.0000e-005	0.0000	4.0000e-005	0.0000	0.3029	0.3029	0.0000	4.0000e-005	0.3163
Worker	5.0000e-005	4.0000e-005	4.7000e-004	0.0000	1.6000e-004	0.0000	1.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1270	0.1270	0.0000	0.0000	0.1280
Total	**7.0000e-005**	**6.6000e-004**	**7.2000e-004**	**0.0000**	**2.7000e-004**	**1.0000e-005**	**2.9000e-004**	**7.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.4298**	**0.4298**	**0.0000**	**4.0000e-005**	**0.4443**

3.3 Grading - 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	tons/yr										MT/yr					
Fugitive Dust					0.0425	0.0000	0.0425	0.0206	0.0000	0.0206	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0103	0.1076	0.0885	1.8000e-004		4.6500e-003	4.6500e-003		4.2800e-003	4.2800e-003	0.0000	15.6364	15.6364	5.0600e-003	0.0000	15.7628
Total	**0.0103**	**0.1076**	**0.0885**	**1.8000e-004**	**0.0425**	**4.6500e-003**	**0.0472**	**0.0206**	**4.2800e-003**	**0.0248**	**0.0000**	**15.6364**	**15.6364**	**5.0600e-003**	**0.0000**	**15.7628**

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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 - 2023

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	5.0000e-005	1.4400e-003	5.7000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7067	0.7067	1.0000e-005	1.0000e-004	0.7380
Worker	3.5000e-004	2.6000e-004	3.3900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9140	0.9140	2.0000e-005	2.0000e-005	0.9217
Total	**4.0000e-004**	**1.7000e-003**	**3.9600e-003**	**2.0000e-005**	**1.4600e-003**	**2.0000e-005**	**1.4700e-003**	**4.0000e-004**	**2.0000e-005**	**4.1000e-004**	**0.0000**	**1.6207**	**1.6207**	**3.0000e-005**	**1.2000e-004**	**1.6597**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0425	0.0000	0.0425	0.0206	0.0000	0.0206	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0103	0.1076	0.0885	1.8000e-004		4.6500e-003	4.6500e-003		4.2800e-003	4.2800e-003	0.0000	15.6364	15.6364	5.0600e-003	0.0000	15.7628
Total	**0.0103**	**0.1076**	**0.0885**	**1.8000e-004**	**0.0425**	**4.6500e-003**	**0.0472**	**0.0206**	**4.2800e-003**	**0.0248**	**0.0000**	**15.6364**	**15.6364**	**5.0600e-003**	**0.0000**	**15.7628**

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

3.3 Grading - 2023

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	5.0000e-005	1.4400e-003	5.7000e-004	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	0.7067	0.7067	1.0000e-005	1.0000e-004	0.7380
Worker	3.5000e-004	2.6000e-004	3.3900e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9140	0.9140	2.0000e-005	2.0000e-005	0.9217
Total	**4.0000e-004**	**1.7000e-003**	**3.9600e-003**	**2.0000e-005**	**1.4600e-003**	**2.0000e-005**	**1.4700e-003**	**4.0000e-004**	**2.0000e-005**	**4.1000e-004**	**0.0000**	**1.6207**	**1.6207**	**3.0000e-005**	**1.2000e-004**	**1.6597**

3.4 Building Construction - 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	tons/yr										MT/yr					
Off-Road	0.1046	0.9566	1.0802	1.7900e-003		0.0465	0.0465		0.0438	0.0438	0.0000	154.1502	154.1502	0.0367	0.0000	155.0669
Total	**0.1046**	**0.9566**	**1.0802**	**1.7900e-003**		**0.0465**	**0.0465**		**0.0438**	**0.0438**	**0.0000**	**154.1502**	**154.1502**	**0.0367**	**0.0000**	**155.0669**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Annual

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

3.4 Building Construction - 2023

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	2.7400e-003	0.0866	0.0345	4.4000e-004	0.0160	7.2000e-004	0.0167	4.6100e-003	6.9000e-004	5.2900e-003	0.0000	42.5169	42.5169	4.3000e-004	6.2900e-003	44.4011
Worker	0.0313	0.0232	0.3027	8.8000e-004	0.1060	5.1000e-004	0.1065	0.0281	4.7000e-004	0.0286	0.0000	81.6075	81.6075	2.0100e-003	2.1400e-003	82.2956
Total	**0.0340**	**0.1098**	**0.3372**	**1.3200e-003**	**0.1219**	**1.2300e-003**	**0.1232**	**0.0328**	**1.1600e-003**	**0.0339**	**0.0000**	**124.1244**	**124.1244**	**2.4400e-003**	**8.4300e-003**	**126.6967**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1046	0.9566	1.0802	1.7900e-003		0.0465	0.0465		0.0438	0.0438	0.0000	154.1500	154.1500	0.0367	0.0000	155.0667
Total	**0.1046**	**0.9566**	**1.0802**	**1.7900e-003**		**0.0465**	**0.0465**		**0.0438**	**0.0438**	**0.0000**	**154.1500**	**154.1500**	**0.0367**	**0.0000**	**155.0667**

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

3.4 Building Construction - 2023

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	2.7400e-003	0.0866	0.0345	4.4000e-004	0.0160	7.2000e-004	0.0167	4.6100e-003	6.9000e-004	5.2900e-003	0.0000	42.5169	42.5169	4.3000e-004	6.2900e-003	44.4011
Worker	0.0313	0.0232	0.3027	8.8000e-004	0.1060	5.1000e-004	0.1065	0.0281	4.7000e-004	0.0286	0.0000	81.6075	81.6075	2.0100e-003	2.1400e-003	82.2956
Total	**0.0340**	**0.1098**	**0.3372**	**1.3200e-003**	**0.1219**	**1.2300e-003**	**0.1232**	**0.0328**	**1.1600e-003**	**0.0339**	**0.0000**	**124.1244**	**124.1244**	**2.4400e-003**	**8.4300e-003**	**126.6967**

3.5 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	tons/yr										MT/yr					
Off-Road	5.6800e-003	0.0561	0.0802	1.3000e-004		2.8100e-003	2.8100e-003		2.5800e-003	2.5800e-003	0.0000	11.0148	11.0148	3.5600e-003	0.0000	11.1038
Paving	6.3700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0121**	**0.0561**	**0.0802**	**1.3000e-004**		**2.8100e-003**	**2.8100e-003**		**2.5800e-003**	**2.5800e-003**	**0.0000**	**11.0148**	**11.0148**	**3.5600e-003**	**0.0000**	**11.1038**

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

3.5 Paving - 2023

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	2.0000e-005	5.7000e-004	2.3000e-004	0.0000	1.0000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2776	0.2776	0.0000	4.0000e-005	0.2899
Worker	2.3000e-004	1.7000e-004	2.2400e-003	1.0000e-005	7.9000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6051	0.6051	1.0000e-005	2.0000e-005	0.6102
Total	**2.5000e-004**	**7.4000e-004**	**2.4700e-003**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**9.0000e-004**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**0.8827**	**0.8827**	**1.0000e-005**	**6.0000e-005**	**0.9002**

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	5.6800e-003	0.0561	0.0802	1.3000e-004		2.8100e-003	2.8100e-003		2.5800e-003	2.5800e-003	0.0000	11.0148	11.0148	3.5600e-003	0.0000	11.1038
Paving	6.3700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0121**	**0.0561**	**0.0802**	**1.3000e-004**		**2.8100e-003**	**2.8100e-003**		**2.5800e-003**	**2.5800e-003**	**0.0000**	**11.0148**	**11.0148**	**3.5600e-003**	**0.0000**	**11.1038**

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

3.5 Paving - 2023

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	2.0000e-005	5.7000e-004	2.3000e-004	0.0000	1.0000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2776	0.2776	0.0000	4.0000e-005	0.2899
Worker	2.3000e-004	1.7000e-004	2.2400e-003	1.0000e-005	7.9000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6051	0.6051	1.0000e-005	2.0000e-005	0.6102
Total	**2.5000e-004**	**7.4000e-004**	**2.4700e-003**	**1.0000e-005**	**8.9000e-004**	**0.0000**	**9.0000e-004**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**0.8827**	**0.8827**	**1.0000e-005**	**6.0000e-005**	**0.9002**

3.6 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	tons/yr										MT/yr					
Archit. Coating	0.4912					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0500e-003	7.1700e-003	9.9600e-003	2.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	1.4043	1.4043	8.0000e-005	0.0000	1.4064
Total	**0.4923**	**7.1700e-003**	**9.9600e-003**	**2.0000e-005**		**3.9000e-004**	**3.9000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**1.4043**	**1.4043**	**8.0000e-005**	**0.0000**	**1.4064**

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

3.6 Architectural Coating - 2023

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	2.0000e-005	5.7000e-004	2.3000e-004	0.0000	1.0000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2776	0.2776	0.0000	4.0000e-005	0.2899
Worker	5.2000e-004	3.8000e-004	5.0100e-003	1.0000e-005	1.7500e-003	1.0000e-005	1.7600e-003	4.7000e-004	1.0000e-005	4.7000e-004	0.0000	1.3499	1.3499	3.0000e-005	4.0000e-005	1.3613
Total	**5.4000e-004**	**9.5000e-004**	**5.2400e-003**	**1.0000e-005**	**1.8500e-003**	**1.0000e-005**	**1.8700e-003**	**5.0000e-004**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**1.6275**	**1.6275**	**3.0000e-005**	**8.0000e-005**	**1.6512**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4912					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0500e-003	7.1700e-003	9.9600e-003	2.0000e-005		3.9000e-004	3.9000e-004		3.9000e-004	3.9000e-004	0.0000	1.4043	1.4043	8.0000e-005	0.0000	1.4064
Total	**0.4923**	**7.1700e-003**	**9.9600e-003**	**2.0000e-005**		**3.9000e-004**	**3.9000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**1.4043**	**1.4043**	**8.0000e-005**	**0.0000**	**1.4064**

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

3.6 Architectural Coating - 2023

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	2.0000e-005	5.7000e-004	2.3000e-004	0.0000	1.0000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2776	0.2776	0.0000	4.0000e-005	0.2899
Worker	5.2000e-004	3.8000e-004	5.0100e-003	1.0000e-005	1.7500e-003	1.0000e-005	1.7600e-003	4.7000e-004	1.0000e-005	4.7000e-004	0.0000	1.3499	1.3499	3.0000e-005	4.0000e-005	1.3613
Total	**5.4000e-004**	**9.5000e-004**	**5.2400e-003**	**1.0000e-005**	**1.8500e-003**	**1.0000e-005**	**1.8700e-003**	**5.0000e-004**	**1.0000e-005**	**5.0000e-004**	**0.0000**	**1.6275**	**1.6275**	**3.0000e-005**	**8.0000e-005**	**1.6512**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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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	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
City Park	0.00	0.00	0.00		
General Heavy Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	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
City Park	0.00	0.00	0.00	33.00	48.00	19.00	0	0	0
General Heavy Industry	0.00	0.00	0.00	59.00	28.00	13.00	0	0	0
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	59.00	0.00	41.00	0	0	0

4.4 Fleet Mix

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Refrigerated Warehouse-No Rail	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

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	tons/yr										MT/yr					
City Park	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
General Heavy Industry	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
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
Parking Lot	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
Refrigerated Warehouse-No Rail	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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	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
General Heavy Industry	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
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
Parking Lot	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
Refrigerated Warehouse-No Rail	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			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**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

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	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

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Annual

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	tons/yr										MT/yr					
Mitigated	0.4236	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0108
Unmitigated	0.4236	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0108

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	0.0491					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3740					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0108
Total	**0.4236**	**5.0000e-005**	**5.1900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0108**

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	0.0491					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3740					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.1900e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0101	0.0101	3.0000e-005	0.0000	0.0108
Total	**0.4236**	**5.0000e-005**	**5.1900e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0101**	**0.0101**	**3.0000e-005**	**0.0000**	**0.0108**

7.0 Water Detail

7.1 Mitigation Measures Water

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Annual

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			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	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			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	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

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Annual

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

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**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

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	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

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

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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

Cottonwood & Edgemont (Construction - Unmitigated)

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	89.67	1000sqft	2.06	89,667.00	0
Refrigerated Warehouse-No Rail	9.96	1000sqft	0.23	9,963.00	0
Other Asphalt Surfaces	176.40	1000sqft	4.05	176,404.00	0
Parking Lot	130.00	Space	0.81	35,264.00	0
City Park	0.79	Acre	0.79	34,588.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - Consistent with the IS/MND's model.

Construction Phase - See SWAPE's comments on "Unsubstantiated Changes to Individual Construction Phase Lengths"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

Trips and VMT - Consistent with the IS/MND's model.

Grading - Left as default

Architectural Coating - See SWAPE's comments on "Unsubstantiated Reductions to Architectural Coating Emission Factors"

Vehicle Trips - Consistent with the IS/MND's model.

Energy Use - Consistent with the IS/MND's model.

Water And Wastewater - Consistent with the IS/MND's model.

Solid Waste - Consistent with the IS/MND's model.

Construction Off-road Equipment Mitigation - Consistent with the IS/MND's model

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	6.00
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	230.00	133.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	11.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24E	0.95	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	3.22	0.00
tblLandUse	LandUseSquareFeet	89,670.00	89,667.00
tblLandUse	LandUseSquareFeet	9,960.00	9,963.00
tblLandUse	LandUseSquareFeet	176,400.00	176,404.00

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

tblLandUse	LandUseSquareFeet	52,000.00	35,264.00
tblLandUse	LandUseSquareFeet	34,412.40	34,588.00
tblLandUse	LotAcreage	1.17	0.81
tblSolidWaste	SolidWasteGenerationRate	0.07	0.00
tblSolidWaste	SolidWasteGenerationRate	111.19	0.00
tblSolidWaste	SolidWasteGenerationRate	9.36	0.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	7.00
tblTripsAndVMT	VendorTripNumber	57.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	18.00	5.00
tblTripsAndVMT	WorkerTripNumber	15.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	13.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

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

tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblWater	IndoorWaterUseRate	20,736,187.50	0.00
tblWater	IndoorWaterUseRate	2,303,250.00	0.00
tblWater	OutdoorWaterUseRate	941,270.27	0.00

2.0 Emissions Summary

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, 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					
2023	89.6132	27.7315	22.0746	0.0478	19.7513	1.2680	21.0193	10.1283	1.1666	11.2950	0.0000	4,718.2341	4,718.2341	1.1948	0.1381	4,775.5818
Maximum	**89.6132**	**27.7315**	**22.0746**	**0.0478**	**19.7513**	**1.2680**	**21.0193**	**10.1283**	**1.1666**	**11.2950**	**0.0000**	**4,718.2341**	**4,718.2341**	**1.1948**	**0.1381**	**4,775.5818**

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					
2023	89.6132	27.7315	22.0746	0.0478	19.7513	1.2680	21.0193	10.1283	1.1666	11.2950	0.0000	4,718.2341	4,718.2341	1.1948	0.1381	4,775.5818
Maximum	**89.6132**	**27.7315**	**22.0746**	**0.0478**	**19.7513**	**1.2680**	**21.0193**	**10.1283**	**1.1666**	**11.2950**	**0.0000**	**4,718.2341**	**4,718.2341**	**1.1948**	**0.1381**	**4,775.5818**

	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**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, 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	2.3224	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
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	**2.3224**	**3.8000e-004**	**0.0415**	**0.0000**	**0.0000**	**1.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**1.5000e-004**		**0.0890**	**0.0890**	**2.3000e-004**	**0.0000**	**0.0949**

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	2.3224	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
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	**2.3224**	**3.8000e-004**	**0.0415**	**0.0000**	**0.0000**	**1.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**1.5000e-004**		**0.0890**	**0.0890**	**2.3000e-004**	**0.0000**	**0.0949**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, 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	3/1/2023	3/8/2023	5	6	
2	Grading	Grading	3/9/2023	3/24/2023	5	12	
3	Building Construction	Building Construction	3/25/2023	9/27/2023	5	133	
4	Paving	Paving	9/28/2023	10/12/2023	5	11	
5	Architectural Coating	Architectural Coating	10/13/2023	10/27/2023	5	11	

Acres of Grading (Site Preparation Phase): 9

Acres of Grading (Grading Phase): 12

Acres of Paving: 4.86

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 149,445; Non-Residential Outdoor: 49,815; Striped Parking Area: 12,700 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Site Preparation	7	5.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	145.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	13.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

3.2 Site Preparation - 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					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	6.7600e-003	0.1960	0.0807	1.0500e-003	0.0384	1.7100e-003	0.0401	0.0111	1.6300e-003	0.0127		111.1626	111.1626	1.1300e-003	0.0164	116.0860
Worker	0.0183	0.0113	0.1834	4.9000e-004	0.0559	2.6000e-004	0.0562	0.0148	2.4000e-004	0.0151		50.3102	50.3102	1.1500e-003	1.1700e-003	50.6884
Total	**0.0250**	**0.2073**	**0.2641**	**1.5400e-003**	**0.0943**	**1.9700e-003**	**0.0963**	**0.0259**	**1.8700e-003**	**0.0278**		**161.4728**	**161.4728**	**2.2800e-003**	**0.0176**	**166.7745**

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

3.2 Site Preparation - 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					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	6.7600e-003	0.1960	0.0807	1.0500e-003	0.0384	1.7100e-003	0.0401	0.0111	1.6300e-003	0.0127		111.1626	111.1626	1.1300e-003	0.0164	116.0860
Worker	0.0183	0.0113	0.1834	4.9000e-004	0.0559	2.6000e-004	0.0562	0.0148	2.4000e-004	0.0151		50.3102	50.3102	1.1500e-003	1.1700e-003	50.6884
Total	**0.0250**	**0.2073**	**0.2641**	**1.5400e-003**	**0.0943**	**1.9700e-003**	**0.0963**	**0.0259**	**1.8700e-003**	**0.0278**		**161.4728**	**161.4728**	**2.2800e-003**	**0.0176**	**166.7745**

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

3.3 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

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	7.8900e-003	0.2287	0.0942	1.2200e-003	0.0448	1.9900e-003	0.0468	0.0129	1.9100e-003	0.0148		129.6897	129.6897	1.3200e-003	0.0192	135.4337
Worker	0.0658	0.0406	0.6603	1.7700e-003	0.2012	9.4000e-004	0.2021	0.0534	8.7000e-004	0.0542		181.1165	181.1165	4.1400e-003	4.2200e-003	182.4783
Total	**0.0737**	**0.2693**	**0.7545**	**2.9900e-003**	**0.2460**	**2.9300e-003**	**0.2490**	**0.0663**	**2.7800e-003**	**0.0690**		**310.8062**	**310.8062**	**5.4600e-003**	**0.0234**	**317.9120**

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

3.3 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

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	7.8900e-003	0.2287	0.0942	1.2200e-003	0.0448	1.9900e-003	0.0468	0.0129	1.9100e-003	0.0148		129.6897	129.6897	1.3200e-003	0.0192	135.4337
Worker	0.0658	0.0406	0.6603	1.7700e-003	0.2012	9.4000e-004	0.2021	0.0534	8.7000e-004	0.0542		181.1165	181.1165	4.1400e-003	4.2200e-003	182.4783
Total	**0.0737**	**0.2693**	**0.7545**	**2.9900e-003**	**0.2460**	**2.9300e-003**	**0.2490**	**0.0663**	**2.7800e-003**	**0.0690**		**310.8062**	**310.8062**	**5.4600e-003**	**0.0234**	**317.9120**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

3.4 Building Construction - 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0428	1.2415	0.5112	6.6400e-003	0.2434	0.0108	0.2542	0.0701	0.0103	0.0804		704.0298	704.0298	7.1800e-003	0.1040	735.2116
Worker	0.5298	0.3274	5.3194	0.0143	1.6208	7.6000e-003	1.6284	0.4298	7.0000e-003	0.4368		1,458.9944	1,458.9944	0.0333	0.0340	1,469.9642
Total	**0.5726**	**1.5688**	**5.8306**	**0.0209**	**1.8642**	**0.0184**	**1.8826**	**0.4999**	**0.0173**	**0.5173**		**2,163.0242**	**2,163.0242**	**0.0405**	**0.1381**	**2,205.1758**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

3.4 Building Construction - 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0428	1.2415	0.5112	6.6400e-003	0.2434	0.0108	0.2542	0.0701	0.0103	0.0804		704.0298	704.0298	7.1800e-003	0.1040	735.2116
Worker	0.5298	0.3274	5.3194	0.0143	1.6208	7.6000e-003	1.6284	0.4298	7.0000e-003	0.4368		1,458.9944	1,458.9944	0.0333	0.0340	1,469.9642
Total	**0.5726**	**1.5688**	**5.8306**	**0.0209**	**1.8642**	**0.0184**	**1.8826**	**0.4999**	**0.0173**	**0.5173**		**2,163.0242**	**2,163.0242**	**0.0405**	**0.1381**	**2,205.1758**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

3.5 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.1576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1903**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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	3.3800e-003	0.0980	0.0404	5.2000e-004	0.0192	8.5000e-004	0.0201	5.5300e-003	8.2000e-004	6.3500e-003		55.5813	55.5813	5.7000e-004	8.2100e-003	58.0430
Worker	0.0475	0.0294	0.4769	1.2800e-003	0.1453	6.8000e-004	0.1460	0.0385	6.3000e-004	0.0392		130.8064	130.8064	2.9900e-003	3.0500e-003	131.7899
Total	**0.0509**	**0.1274**	**0.5173**	**1.8000e-003**	**0.1645**	**1.5300e-003**	**0.1661**	**0.0441**	**1.4500e-003**	**0.0455**		**186.3877**	**186.3877**	**3.5600e-003**	**0.0113**	**189.8329**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

3.5 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.1576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1903**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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	3.3800e-003	0.0980	0.0404	5.2000e-004	0.0192	8.5000e-004	0.0201	5.5300e-003	8.2000e-004	6.3500e-003		55.5813	55.5813	5.7000e-004	8.2100e-003	58.0430
Worker	0.0475	0.0294	0.4769	1.2800e-003	0.1453	6.8000e-004	0.1460	0.0385	6.3000e-004	0.0392		130.8064	130.8064	2.9900e-003	3.0500e-003	131.7899
Total	**0.0509**	**0.1274**	**0.5173**	**1.8000e-003**	**0.1645**	**1.5300e-003**	**0.1661**	**0.0441**	**1.4500e-003**	**0.0455**		**186.3877**	**186.3877**	**3.5600e-003**	**0.0113**	**189.8329**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Summer

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

3.6 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	89.3122					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	**89.5039**	**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	3.3800e-003	0.0980	0.0404	5.2000e-004	0.0192	8.5000e-004	0.0201	5.5300e-003	8.2000e-004	6.3500e-003		55.5813	55.5813	5.7000e-004	8.2100e-003	58.0430
Worker	0.1060	0.0655	1.0639	2.8500e-003	0.3242	1.5200e-003	0.3257	0.0860	1.4000e-003	0.0874		291.7989	291.7989	6.6600e-003	6.8000e-003	293.9928
Total	**0.1093**	**0.1635**	**1.1043**	**3.3700e-003**	**0.3434**	**2.3700e-003**	**0.3457**	**0.0915**	**2.2200e-003**	**0.0937**		**347.3802**	**347.3802**	**7.2300e-003**	**0.0150**	**352.0359**

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

3.6 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	89.3122					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	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**89.5039**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**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	3.3800e-003	0.0980	0.0404	5.2000e-004	0.0192	8.5000e-004	0.0201	5.5300e-003	8.2000e-004	6.3500e-003		55.5813	55.5813	5.7000e-004	8.2100e-003	58.0430
Worker	0.1060	0.0655	1.0639	2.8500e-003	0.3242	1.5200e-003	0.3257	0.0860	1.4000e-003	0.0874		291.7989	291.7989	6.6600e-003	6.8000e-003	293.9928
Total	**0.1093**	**0.1635**	**1.1043**	**3.3700e-003**	**0.3434**	**2.3700e-003**	**0.3457**	**0.0915**	**2.2200e-003**	**0.0937**		**347.3802**	**347.3802**	**7.2300e-003**	**0.0150**	**352.0359**

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
City Park	0.00	0.00	0.00		
General Heavy Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	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
City Park	0.00	0.00	0.00	33.00	48.00	19.00	0	0	0
General Heavy Industry	0.00	0.00	0.00	59.00	28.00	13.00	0	0	0

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

	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	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	59.00	0.00	41.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Refrigerated Warehouse-No Rail	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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					
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					
City Park	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
General Heavy Industry	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
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
Parking Lot	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
Refrigerated Warehouse-No Rail	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**

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					
City Park	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
General Heavy Industry	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
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
Parking Lot	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
Refrigerated Warehouse-No Rail	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

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, 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	2.3224	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
Unmitigated	2.3224	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949

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	0.2692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8500e-003	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
Total	**2.3224**	**3.8000e-004**	**0.0415**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0890**	**0.0890**	**2.3000e-004**		**0.0949**

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	0.2692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8500e-003	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
Total	**2.3224**	**3.8000e-004**	**0.0415**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0890**	**0.0890**	**2.3000e-004**		**0.0949**

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

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

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

Cottonwood & Edgemont (Construction - Unmitigated)

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	89.67	1000sqft	2.06	89,667.00	0
Refrigerated Warehouse-No Rail	9.96	1000sqft	0.23	9,963.00	0
Other Asphalt Surfaces	176.40	1000sqft	4.05	176,404.00	0
Parking Lot	130.00	Space	0.81	35,264.00	0
City Park	0.79	Acre	0.79	34,588.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS/MND's model.

Land Use - Consistent with the IS/MND's model.

Construction Phase - See SWAPE's comments on "Unsubstantiated Changes to Individual Construction Phase Lengths"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Off-road Equipment - See SWAPE's comments on "Unsubstantiated Changes to Construction Off-Road Equipment Unit Amounts"

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

Trips and VMT - Consistent with the IS/MND's model.

Grading - Left as default

Architectural Coating - See SWAPE's comments on "Unsubstantiated Reductions to Architectural Coating Emission Factors"

Vehicle Trips - Consistent with the IS/MND's model.

Energy Use - Consistent with the IS/MND's model.

Water And Wastewater - Consistent with the IS/MND's model.

Solid Waste - Consistent with the IS/MND's model.

Construction Off-road Equipment Mitigation - Consistent with the IS/MND's model

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	6.00
tblConstructionPhase	NumDays	20.00	12.00
tblConstructionPhase	NumDays	230.00	133.00
tblConstructionPhase	NumDays	20.00	11.00
tblConstructionPhase	NumDays	20.00	11.00
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	T24E	1.97	0.00
tblEnergyUse	T24E	0.95	0.00
tblEnergyUse	T24NG	15.20	0.00
tblEnergyUse	T24NG	3.22	0.00
tblLandUse	LandUseSquareFeet	89,670.00	89,667.00
tblLandUse	LandUseSquareFeet	9,960.00	9,963.00
tblLandUse	LandUseSquareFeet	176,400.00	176,404.00

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

tblLandUse	LandUseSquareFeet	52,000.00	35,264.00
tblLandUse	LandUseSquareFeet	34,412.40	34,588.00
tblLandUse	LotAcreage	1.17	0.81
tblSolidWaste	SolidWasteGenerationRate	0.07	0.00
tblSolidWaste	SolidWasteGenerationRate	111.19	0.00
tblSolidWaste	SolidWasteGenerationRate	9.36	0.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	7.00
tblTripsAndVMT	VendorTripNumber	57.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	VendorTripNumber	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	18.00	5.00
tblTripsAndVMT	WorkerTripNumber	15.00	18.00
tblTripsAndVMT	WorkerTripNumber	15.00	13.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00

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

tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	6.42	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	5.09	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	3.93	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblWater	IndoorWaterUseRate	20,736,187.50	0.00
tblWater	IndoorWaterUseRate	2,303,250.00	0.00
tblWater	OutdoorWaterUseRate	941,270.27	0.00

2.0 Emissions Summary

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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					
2023	89.6063	27.7438	21.0919	0.0465	19.7513	1.2680	21.0193	10.1283	1.1666	11.2950	0.0000	4,582.9669	4,582.9669	1.1948	0.1392	4,640.6493
Maximum	**89.6063**	**27.7438**	**21.0919**	**0.0465**	**19.7513**	**1.2680**	**21.0193**	**10.1283**	**1.1666**	**11.2950**	**0.0000**	**4,582.9669**	**4,582.9669**	**1.1948**	**0.1392**	**4,640.6493**

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					
2023	89.6063	27.7438	21.0919	0.0465	19.7513	1.2680	21.0193	10.1283	1.1666	11.2950	0.0000	4,582.9669	4,582.9669	1.1948	0.1392	4,640.6493
Maximum	**89.6063**	**27.7438**	**21.0919**	**0.0465**	**19.7513**	**1.2680**	**21.0193**	**10.1283**	**1.1666**	**11.2950**	**0.0000**	**4,582.9669**	**4,582.9669**	**1.1948**	**0.1392**	**4,640.6493**

	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**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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	2.3224	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
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	**2.3224**	**3.8000e-004**	**0.0415**	**0.0000**	**0.0000**	**1.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**1.5000e-004**		**0.0890**	**0.0890**	**2.3000e-004**	**0.0000**	**0.0949**

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	2.3224	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
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	**2.3224**	**3.8000e-004**	**0.0415**	**0.0000**	**0.0000**	**1.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**1.5000e-004**		**0.0890**	**0.0890**	**2.3000e-004**	**0.0000**	**0.0949**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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	3/1/2023	3/8/2023	5	6	
2	Grading	Grading	3/9/2023	3/24/2023	5	12	
3	Building Construction	Building Construction	3/25/2023	9/27/2023	5	133	
4	Paving	Paving	9/28/2023	10/12/2023	5	11	
5	Architectural Coating	Architectural Coating	10/13/2023	10/27/2023	5	11	

Acres of Grading (Site Preparation Phase): 9

Acres of Grading (Grading Phase): 12

Acres of Paving: 4.86

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 149,445; Non-Residential Outdoor: 49,815; Striped Parking Area: 12,700 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

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

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
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
Site Preparation	7	5.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	18.00	7.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	145.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	13.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	29.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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

3.2 Site Preparation - 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					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	6.2600e-003	0.2079	0.0834	1.0500e-003	0.0384	1.7100e-003	0.0401	0.0111	1.6400e-003	0.0127		111.4385	111.4385	1.1100e-003	0.0165	116.3777
Worker	0.0171	0.0117	0.1490	4.5000e-004	0.0559	2.6000e-004	0.0562	0.0148	2.4000e-004	0.0151		45.5855	45.5855	1.1400e-003	1.2000e-003	45.9719
Total	**0.0234**	**0.2196**	**0.2324**	**1.5000e-003**	**0.0943**	**1.9700e-003**	**0.0963**	**0.0259**	**1.8800e-003**	**0.0278**		**157.0240**	**157.0240**	**2.2500e-003**	**0.0177**	**162.3496**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

3.2 Site Preparation - 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					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**19.6570**	**1.2660**	**20.9230**	**10.1025**	**1.1647**	**11.2672**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

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	6.2600e-003	0.2079	0.0834	1.0500e-003	0.0384	1.7100e-003	0.0401	0.0111	1.6400e-003	0.0127		111.4385	111.4385	1.1100e-003	0.0165	116.3777
Worker	0.0171	0.0117	0.1490	4.5000e-004	0.0559	2.6000e-004	0.0562	0.0148	2.4000e-004	0.0151		45.5855	45.5855	1.1400e-003	1.2000e-003	45.9719
Total	**0.0234**	**0.2196**	**0.2324**	**1.5000e-003**	**0.0943**	**1.9700e-003**	**0.0963**	**0.0259**	**1.8800e-003**	**0.0278**		**157.0240**	**157.0240**	**2.2500e-003**	**0.0177**	**162.3496**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

3.3 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**		**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

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	7.3100e-003	0.2425	0.0973	1.2300e-003	0.0448	2.0000e-003	0.0468	0.0129	1.9100e-003	0.0148		130.0116	130.0116	1.3000e-003	0.0192	135.7739
Worker	0.0616	0.0422	0.5362	1.6000e-003	0.2012	9.4000e-004	0.2021	0.0534	8.7000e-004	0.0542		164.1079	164.1079	4.1200e-003	4.3200e-003	165.4988
Total	**0.0690**	**0.2847**	**0.6336**	**2.8300e-003**	**0.2460**	**2.9400e-003**	**0.2490**	**0.0663**	**2.7800e-003**	**0.0691**		**294.1194**	**294.1194**	**5.4200e-003**	**0.0236**	**301.2727**

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

3.3 Grading - 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					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**7.0826**	**0.7749**	**7.8575**	**3.4247**	**0.7129**	**4.1377**	**0.0000**	**2,872.6910**	**2,872.6910**	**0.9291**		**2,895.9182**

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	7.3100e-003	0.2425	0.0973	1.2300e-003	0.0448	2.0000e-003	0.0468	0.0129	1.9100e-003	0.0148		130.0116	130.0116	1.3000e-003	0.0192	135.7739
Worker	0.0616	0.0422	0.5362	1.6000e-003	0.2012	9.4000e-004	0.2021	0.0534	8.7000e-004	0.0542		164.1079	164.1079	4.1200e-003	4.3200e-003	165.4988
Total	**0.0690**	**0.2847**	**0.6336**	**2.8300e-003**	**0.2460**	**2.9400e-003**	**0.2490**	**0.0663**	**2.7800e-003**	**0.0691**		**294.1194**	**294.1194**	**5.4200e-003**	**0.0236**	**301.2727**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

3.4 Building Construction - 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0397	1.3166	0.5284	6.6600e-003	0.2434	0.0109	0.2542	0.0701	0.0104	0.0805		705.7770	705.7770	7.0400e-003	0.1044	737.0585
Worker	0.4965	0.3397	4.3195	0.0129	1.6208	7.6000e-003	1.6284	0.4298	7.0000e-003	0.4368		1,321.9800	1,321.9800	0.0332	0.0348	1,333.1848
Total	**0.5362**	**1.6563**	**4.8479**	**0.0196**	**1.8642**	**0.0185**	**1.8826**	**0.4999**	**0.0174**	**0.5173**		**2,027.7570**	**2,027.7570**	**0.0402**	**0.1392**	**2,070.2433**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

3.4 Building Construction - 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	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

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	0.0397	1.3166	0.5284	6.6600e-003	0.2434	0.0109	0.2542	0.0701	0.0104	0.0805		705.7770	705.7770	7.0400e-003	0.1044	737.0585
Worker	0.4965	0.3397	4.3195	0.0129	1.6208	7.6000e-003	1.6284	0.4298	7.0000e-003	0.4368		1,321.9800	1,321.9800	0.0332	0.0348	1,333.1848
Total	**0.5362**	**1.6563**	**4.8479**	**0.0196**	**1.8642**	**0.0185**	**1.8826**	**0.4999**	**0.0174**	**0.5173**		**2,027.7570**	**2,027.7570**	**0.0402**	**0.1392**	**2,070.2433**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

3.5 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.1576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1903**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**		**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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	3.1300e-003	0.1039	0.0417	5.3000e-004	0.0192	8.6000e-004	0.0201	5.5300e-003	8.2000e-004	6.3500e-003		55.7192	55.7192	5.6000e-004	8.2400e-003	58.1888
Worker	0.0445	0.0305	0.3873	1.1600e-003	0.1453	6.8000e-004	0.1460	0.0385	6.3000e-004	0.0392		118.5223	118.5223	2.9800e-003	3.1200e-003	119.5269
Total	**0.0477**	**0.1344**	**0.4290**	**1.6900e-003**	**0.1645**	**1.5400e-003**	**0.1661**	**0.0441**	**1.4500e-003**	**0.0455**		**174.2416**	**174.2416**	**3.5400e-003**	**0.0114**	**177.7157**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

3.5 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	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.1576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.1903**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**	**0.0000**	**2,207.5841**	**2,207.5841**	**0.7140**		**2,225.4336**

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	3.1300e-003	0.1039	0.0417	5.3000e-004	0.0192	8.6000e-004	0.0201	5.5300e-003	8.2000e-004	6.3500e-003		55.7192	55.7192	5.6000e-004	8.2400e-003	58.1888
Worker	0.0445	0.0305	0.3873	1.1600e-003	0.1453	6.8000e-004	0.1460	0.0385	6.3000e-004	0.0392		118.5223	118.5223	2.9800e-003	3.1200e-003	119.5269
Total	**0.0477**	**0.1344**	**0.4290**	**1.6900e-003**	**0.1645**	**1.5400e-003**	**0.1661**	**0.0441**	**1.4500e-003**	**0.0455**		**174.2416**	**174.2416**	**3.5400e-003**	**0.0114**	**177.7157**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

3.6 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	89.3122					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	**89.5039**	**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	3.1300e-003	0.1039	0.0417	5.3000e-004	0.0192	8.6000e-004	0.0201	5.5300e-003	8.2000e-004	6.3500e-003		55.7192	55.7192	5.6000e-004	8.2400e-003	58.1888
Worker	0.0993	0.0679	0.8639	2.5800e-003	0.3242	1.5200e-003	0.3257	0.0860	1.4000e-003	0.0874		264.3960	264.3960	6.6400e-003	6.9600e-003	266.6370
Total	**0.1024**	**0.1719**	**0.9056**	**3.1100e-003**	**0.3434**	**2.3800e-003**	**0.3457**	**0.0915**	**2.2200e-003**	**0.0937**		**320.1152**	**320.1152**	**7.2000e-003**	**0.0152**	**324.8258**

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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

3.6 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	89.3122					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	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**89.5039**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**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	3.1300e-003	0.1039	0.0417	5.3000e-004	0.0192	8.6000e-004	0.0201	5.5300e-003	8.2000e-004	6.3500e-003		55.7192	55.7192	5.6000e-004	8.2400e-003	58.1888
Worker	0.0993	0.0679	0.8639	2.5800e-003	0.3242	1.5200e-003	0.3257	0.0860	1.4000e-003	0.0874		264.3960	264.3960	6.6400e-003	6.9600e-003	266.6370
Total	**0.1024**	**0.1719**	**0.9056**	**3.1100e-003**	**0.3434**	**2.3800e-003**	**0.3457**	**0.0915**	**2.2200e-003**	**0.0937**		**320.1152**	**320.1152**	**7.2000e-003**	**0.0152**	**324.8258**

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
City Park	0.00	0.00	0.00		
General Heavy Industry	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	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
City Park	0.00	0.00	0.00	33.00	48.00	19.00	0	0	0
General Heavy Industry	0.00	0.00	0.00	59.00	28.00	13.00	0	0	0

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

	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	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	59.00	0.00	41.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
General Heavy Industry	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Other Asphalt Surfaces	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Parking Lot	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468
Refrigerated Warehouse-No Rail	0.534849	0.056022	0.172639	0.141007	0.026597	0.007310	0.011327	0.018693	0.000616	0.000315	0.024057	0.001100	0.005468

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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					
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					
City Park	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
General Heavy Industry	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
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
Parking Lot	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
Refrigerated Warehouse-No Rail	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**

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					
City Park	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
General Heavy Industry	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
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
Parking Lot	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
Refrigerated Warehouse-No Rail	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

Cottonwood & Edgemont (Construction - Unmitigated) - Riverside-South Coast County, Winter

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	2.3224	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
Unmitigated	2.3224	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949

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	0.2692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8500e-003	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
Total	**2.3224**	**3.8000e-004**	**0.0415**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0890**	**0.0890**	**2.3000e-004**		**0.0949**

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	0.2692					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0494					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8500e-003	3.8000e-004	0.0415	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0890	0.0890	2.3000e-004		0.0949
Total	**2.3224**	**3.8000e-004**	**0.0415**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0890**	**0.0890**	**2.3000e-004**		**0.0949**

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

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

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal repesentatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Focus on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years of experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Rosenfeld P. E., Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution.* **233,** 171.

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. Journal of Real Estate Research. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*.. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division
Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation
Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al.cvs. Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.
Case No. 1716-CV10006
Rosenfeld Deposition 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.
Case No. 2:17-cv-01624-ES-SCM
Rosenfeld Deposition 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" Defendant.
Case No. 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No. BC615636
Rosenfeld Deposition 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs vs. The 3M Company et al., Defendants
Case No. 1:16-cv-02531-RBJ
Rosenfeld Deposition 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants
Cause No. 1923
Rosenfeld Deposition 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintifs vs. Chevron Corporation, et al., Defendants
Cause No. C12-01481
Rosenfeld Deposition 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case No. 1:19-cv-00315-RHW
Rosenfeld Deposition 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No. LC102019 (c/w BC582154)
Rosenfeld Deposition 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants
Case No. 4:16-cv-52-DMB-JVM
Rosenfeld Deposition July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No. RG14711115
Rosenfeld Deposition September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No. LALA002187
Rosenfeld Deposition August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action No. 14-C-30000
Rosenfeld Deposition June 2015

In The Iowa District Court for Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No. 4980
Rosenfeld Deposition May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case No. CACE07030358 (26)
Rosenfeld Deposition December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.
Case No. cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., Plaintiffs, vs. Republic Services, Inc., et al., Defendants
Case No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.
Civil Action No. 2:09-cv-232-WHA-TFM
Rosenfeld Deposition July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., Plaintiffs, vs. Drummond Company Inc., et al., Defendants
Civil Action No. CV 2008-2076
Rosenfeld Deposition September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., Plaintiffs, vs. Citgo Petroleum Corporation, et al., Defendants.
Case No. 2:07CV1052
Rosenfeld Deposition July 2009

From: George Hague
To: Julia Descoteaux
Cc: Sean P. Kelleher; City Clerk
Subject: Cottonwood & Edgmont (C&E) = Comments on IS/MND & City zoning map -- 4
Date: Monday, February 27, 2023 11:40:05 PM
Attachments: Screenshot 2023-02-22 at 10.35.36 PM.png

https://moval.gov/city_hall/general-plan2040/NewZoning.pdf
City of Moreno Valley's Zoning Map = showing different BP, LI, I and BPX locations

Good morning Ms Descoteaux, February 24, 2023

Re: Comments on the Cottonwood & Edgemont (C&E) warehouse project's Initial Study (IS) and Mitigated Negative Declaration (MND)— 4

In the City's Notice of Intent to adopt a single Mitigated Negative Declaration (MND) the following can be read:

"Project Description: The Cottonwood & Edgemont Project comprises a proposal for **a Master Plot Plan** (PEN21-0325), Plot Plan (PEN21-0326), and Tentative Parcel Map No. 38325 (PEN21-0327) to allow for the development of two (2) light industrial buildings with a total combined building floor area of 99,630 square feet (s.f.) on an approximately 7.94-gross-acre property (6.88 net acres). **The Project** would include cargo loading areas at each building (within an enclosed truck court with loading docks on the eastern sides of the proposed buildings), parking areas, landscaping, signage, and lighting."

"Potential Environmental Impacts: The City of Moreno Valley has prepared **an Initial Study** to determine the environmental effects associated with the above actions and finds the issuance of **a Mitigated Negative Declaration** is the appropriate level of environmental review. **The Initial Study/Mitigated Negative Declaration** concludes that all potentially significant impacts of **the Project** would be mitigated to a less than significant level."

"Comment Deadline: Pursuant to Section 15105(b) of the CEQA Guidelines, the City has established a 20-day public review period for **the Initial Study/Mitigated Negative Declaration** which begins February 9, 2023, and ends March 1, 2023."

It is very evident from **"the single Initial Study/Mitigated Negative Declaration"** and the reference to **"the Project"** the two warehouses are being treated as a single project.

On the "Notice of Completion & Environmental Document Transmittal" provides the following:

A single "Site Plan".

The Notice of Completion & Environmental Document Transmittal again shows that the C&E warehouse in a single "Site Plan"

The Cottonwood & Edgemont warehouse is a single project of 99,630 sq ft and cannot be consider two different projects. This single project is bringing almost 100,000 sq ft of warehousing to our city with all the negative impacts that such a large project would bring — especially to a census tract with a CalEnviroScreen report as shown in the following:

CalEnviroScreen

Overall Percentiles	
CalEnviroScreen 4.0 Percentile	99
Pollution Burden Percentile	95
Population Characteristics Percentile	98

State law and even our own Environmental Justice Element of our city's General Plan encourages jurisdictions/Moreno Valley to reduce the burden on people living in these areas, but instead the C&E warehouse brings even more pollution and because it is a MND and not an EIR there is no direct, Indirect, cumulative and growth inducing impact analysis.

As can be seen in the city's zoning map in the link found above land zoned Business Park (BP), Light Industrial (LI), Industrial (I) and BPX are all the same color. The fact they are the same color doesn't mean you can build BP, LI, I or BPX on any lands. During the General Plan Update process it became very evident that each of these zones were placed in specific locations because of surrounding uses. This can be seen on the map found below which is a portion of the city's zoning map that includes the proposed Project. On this map you can easily read lands specifically designated either BP, LI, I or BPX. These specific zoning designations on lands is done because of their location as well as existing surrounding land uses and official Land Use Policy which requires a smooth transition between projects and existing uses. Allowing warehousing anywhere BP, LI, I, and BPX is on the map found below would be detrimental to many existing uses and the health of people.

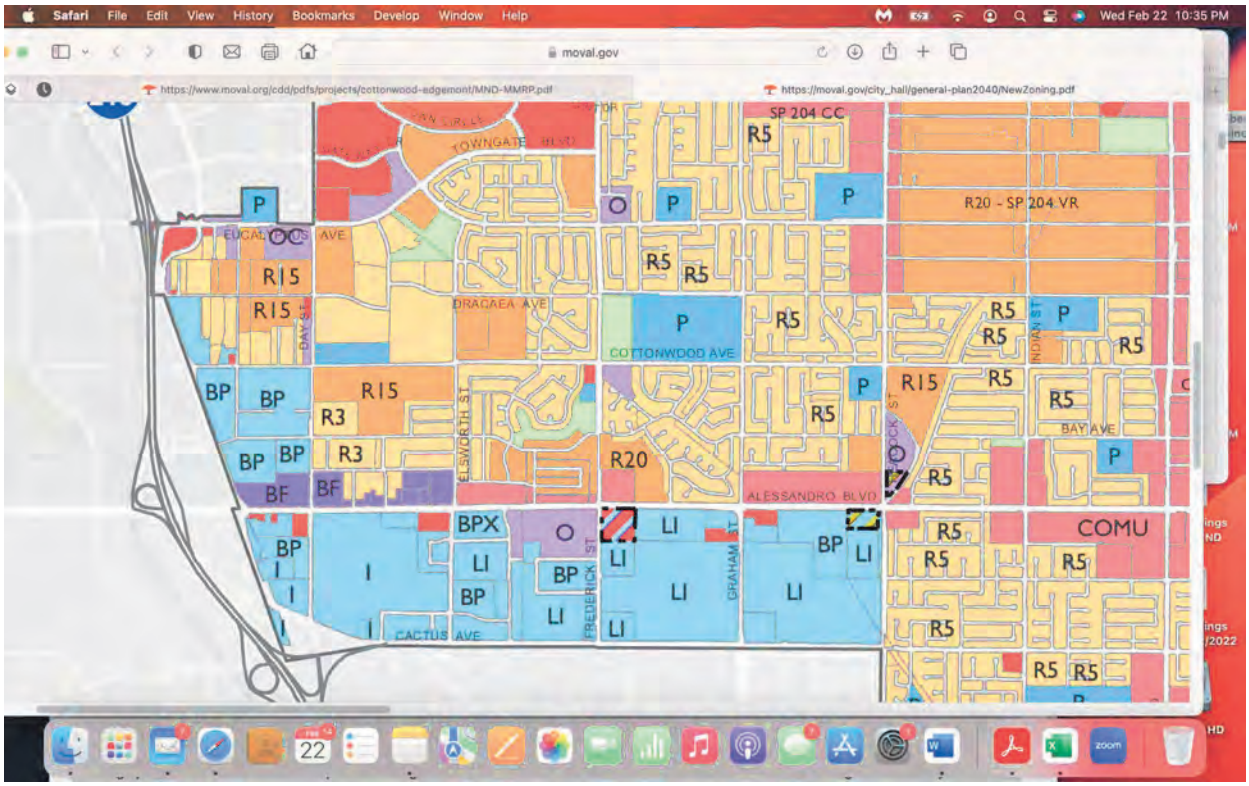
The City gives a misleading description immediately below and in direct conflict with the more thoughtful uses allowed based on their own zoning map and Industrial Districts Chart found below.

9. General Plan Designation: Business Park (BP), which provides areas for manufacturing, research and development, warehousing, and distribution, as well as office and support commercial activities. Refer to Figure 4, Existing General Plan Land Use Designation

The Figure 4 mentioned above has a city developed legend that tries to make the project's lands both BP and LI. The City's own zoning map indicates it is only BP as is shown in Figure 5. **As can be read in the next paragraph and below the map BP doesn't allow warehousing and is suppose to "provide a transition" between sensitive uses and more intense uses like warehousing.** The use of the General Plan BP everywhere in place of BP, LI, I , and BPX would allow warehousing almost everywhere within our city. We must honor the city's zoning map to protect nearby sensitive resources and limit warehouse Industrial use to those allowed in the explanations found in the chart labeled "9.05.020 Industrial Districts" found below.

The correct complete wording for BP is below the map and as follows: The primary purpose of the business park (BP) district is to provide for light industrial, research and development, office-based firms and limited supportive commercial in an attractive and pleasant working environment and a prestigious location. This district is **intended to provide a transition between residential and other sensitive uses and more intense industrial and warehousing uses.**

The following map is a portion of the city zoning map which includes the project site from the link found above = it shows different locations for BP, LI, I, BPX with none listed as BP/LI.



o

"9.05.020 Industrial districts.

A. Business Park District (BP). The primary purpose of the business park (BP) district is to provide for light industrial, research and development, office-based firms and limited supportive commercial in an attractive and pleasant working environment and a prestigious location. This district is intended to provide a transition between residential and other sensitive uses and more intense industrial and warehousing uses.

B. Light Industrial District (LI). The primary purpose of the light industrial (LI) district is to provide for light manufacturing, light industrial, research and development, warehousing and distribution and multitenant industrial uses, as well as certain supporting administrative and professional offices and commercial uses on a limited basis. This district is intended as an area for light industrial uses that can meet high performance standards. This district requires buffering between residential districts and industrial and warehouse structures greater than fifty thousand (50,000) square feet in building area within the LI district. Please refer to the special site development standards in Section 9.05.040(B)(9).

C. Industrial (I). The primary purpose of the industrial (I) district is to provide for manufacturing, research and development, warehousing and distribution and multitenant industrial uses, as well as certain supporting administrative and professional offices and commercial uses on a limited basis. This district is intended as an area for industrial uses that can meet high performance standards but that frequently do not meet site development standards appropriate to planned research and development parks.

D. Business Park-Mixed Use (BPX). The purpose of the business park-mixed use (BPX) district is to provide locations for limited convenience commercial and business support services within close proximity to industrial and business park uses. (Ord. 830 § 3.1, 2011; Ord. 693 § 2 (Exh. B), 2005: Ord. 590 § 2, 2001; Ord. 359, 1992)"

The C&E warehouse with its almost 100,000 sq ft doesn't fit the definition for BP in letter "A" found above. It better fits the definition in letter "C" found above for Industrial. In fact Appendix G: Greenhouse Gas Report reads as follows:

"The Project is an industrial use and would not be required to adhere to this measure" Page 63 and again on page 64.

The C&E project is a single project of almost 100,000 sq ft of warehousing. As Appendix G refers to it, the project is "an industrial use" and doesn't belong on land designated BP on the city's zoning Map and based on the city's own "9.05.020 Industrial District" Chart found above.

A full EIR must be required to fully address the direct, indirect, cumulative and growth inducing impacts from all forms of pollution and other impacts to those in this already burden census tract as can be seen above. A full EIR would do a much better job of addressing all the direct, indirect, cumulative and growth inducing impacts to those areas off site that are part of this project, but are inadequately addressed and therefor makes the project's analysis inadequate.

Please keep me informed of all future documents and meetings related to this project.

Sincerely,

George Hague
Sierra Club
Moreno Valley Group
Conservation Chair

From:	Julia Descoteaux
To:	Catherine Lin
Subject:	Fwd: PEN21-0325, PEN21-0326
Date:	Tuesday, February 28, 2023 11:35:13 AM

See attached

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Julia Descoteaux
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3209 | e: juliad@moval.org w: www.moval.org
14177 Frederick St., Moreno Valley, CA, 92553

From: Mauricio Alvarez <malvarez@riversidetransit.com>
Sent: Tuesday, February 28, 2023 10:01:05 AM
To: Julia Descoteaux <juliad@moval.org>
Subject: PEN21-0325, PEN21-0326

Good Morning Julia,

Thank you for including Riverside Transit Agency in the development review of the 2 warehouses on Old 215 Rd. After reviewing the plans, there are no comments to submit for this particular project at this time.

Thank you,

Mauricio Alvarez, MBA
Planning Analyst
Riverside Transit Agency
p: 951.565.5260 | e: malvarez@riversidetransit.com
Website | Facebook | Twitter | Instagram
1825 Third Street, Riverside, CA 92507

From:	Julia Descoteaux
To:	Catherine Lin
Subject:	Fwd: PEN 21-0325, PEN 21-0326 and PEN 21-0327
Date:	Tuesday, February 28, 2023 11:55:05 AM

See below

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Julia Descoteaux
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3209 | e: juliad@moval.org w: www.moval.org
14177 Frederick St., Moreno Valley, CA, 92553

From: hardheadsrj@aol.com <hardheadsrj@aol.com>
Sent: Tuesday, February 28, 2023 11:50:00 AM
To: Julia Descoteaux <juliad@moval.org>
Subject: PEN 21-0325, PEN 21-0326 and PEN 21-0327

I am writing with concerns about the Mitagated Negative Declaration for this project. Even though the only access to the project is from old 215, all the truck traffic has to pass close to existing residential properties which will cause a lot of noise and air pollution for thr residence in the area. I do not think the project takes this into enough consideration. The area also has had a lot of troubles the sewer and water availablity and I do not see where that is adequatly addressed.

With all the existing warehouse approved in the City I fell it would be best to have a 60 or 90 day moratorium on new warehouse projects.

Thank You Steve Jiannino
24701 Valley Ranch Rd.
Moreno Valley, CA 92557

From:	George Hague
To:	Julia Descoteaux
Cc:	Sean P. Kelleher; City Clerk
Subject:	Comments on the Cottonwood & Edgmeont warehouse project & Land Use and Community Character (LCC) --5
Date:	Tuesday, February 28, 2023 11:28:08 PM

Good morning Ms Descoteaux, February 28, 2023

Re: Comments on the Cottonwood & Edgemont (C&E) 99,630 sq ft warehouse project's Initial Study (IS) and Mitigated Negative Declaration (MND)

The city approved its General Plan in June of 2021 and adopted some very important Land Use and Community Character (LCC) Goals and Policies to protect all of us who selected Moreno Valley to raise our families.

Below are four of these that are in conflict with placing an almost 100,000 sq ft warehouse project near family homes (as near as 18 ft) and across the street from a church (107 feet) — some yards which people enjoy are even closer than their homes.

Goal LCC-3: Build a distinctive sense of place and pride in Moreno Valley.

How are we building pride in Moreno Valley for our residents with the C&E warehouse project when it will bring toxic diesel trucks driving and idling near to their homes. Diesel pollution is very harmful and will make those with asthma have a difficult time and may also contribute to those developing asthma as well as other medical issues. Diesel pollution will also come from much of the equipment that is used during the operation of a warehouse as well as during construction. You must be able to factor in all direct, indirect, cumulative and growth inducing impacts which this MND doesn't provide. The project must be required to produce a full EIR to provide this and other important information for the public and decision makers prior to any vote.

LCC.3-1 Insist on high-quality development that is sensitive to surrounding context throughout the city and particularly in centers and corridors.

This is a policy you would want enforced on any project built near your home, but how is a large warehouse project that is less than 20 ft to 30 ft sensitive to its surroundings when those include family homes. Many of these homes are on the backside of this warehouse where the Diesel Trucks turn around, back up, idle, load and unload cargo. How can these families consider this warehouse project High-Quality which LCC.3.1 reads WE ARE TO INSIST.

PLEASE DO NOT ACCEPT WAREHOUSING AS THE ONLY USE THAT CAN BE

BUILT ON THIS BP ZONE. THERE ARE MANY OTHER QUALITY USES THAT ARE PERMITTED.

LCC.3-2 Use development standards to ensure smooth transitions for areas that border one another so that neighborhoods and districts maintain their unique qualities while being compatible with one another.

Smoooooth Transition with nearby surrounding sensitive receptors is NOT the name of this warehouse project. They do not even put a fence entirely around this Industrial Warehouse project. The height of the fence they use easily allows toxic diesel soot from the project's truck's almost 14 ft exhaust stacks to enter the areas where people live. This is just one of many examples where the project fails to be sensitive to soundings and provide a smooth transition with family home. Noise and Light pollution from what will probably become a 24/7/365 day and night operation is another. They could limit operation to Monday - Friday and from 7am to 9 pm, but they haven't. Lights on timers to dim to 25% when motion isn't detected is something that needs to be required. Equipment with backup warning sounds must be required to have devices that limit the sound to just above ambient sound levels. Use the material that can be applied to warehouse walls to reduce decibels within the project area. These are also mitigations this project could do, but isn't. The main problem is trying to put lipstick on a warehouse to make it sensitive to the surrounding family homes and provide a smooth transition becomes almost impossible. Therefor they do not bring pride to an area with homes so close.

LCC.3-17 screen and buffer nonresidential projects to protect adjacent residential property and other sensitive land uses when necessary to mitigate noise, glare and other adverse effects on adjacent uses.

The C&E warehouse isn't screened and buffered from adjacent residential use. As mentioned above the wall is too short and fails to go around the entire project. The MND reads that ornamental trees will be used when evergreen trees are needed that grow to a height taller than the warehouse. The trees need to be in double overlapping rows with a wide enough spread that makes a solid wall of ever green trees to filter diesel and other pollutions as well as limit some noise and light/glare pollution. Lights on building and poles must be under 18 ft and dimmed to 25 % when motion isn't detected for 10 minutes. Truck and other vehicle lights must be turned off within five minutes of parking. Diesel Alternative Power Units (APU) must not be allowed to operate for more than a total of five minutes. The project must not allow refrigeration areas as part of its warehouse operation. **There are many things in addition to all of those mentioned above that the C&E warehouse could and should do to meet the intent of LCC.3-17, but ISN'T**

Some of the many other uses within Business Park (BP) that is written in the city's "9.05.020 industrial districts" includes the following: "The primary purpose of the business park (BP) district is to provide for light industrial, research and development, office-based firms and limited supportive commercial in an attractive and pleasant working environment and a prestigious location. **This district is intended to provide a transition between residential and other sensitive uses and more intense industrial and warehousing uses."**

The C&E warehouse is counter to the city's own wording as can be read in the "9.05.020 industrial district" chart as seen in the last paragraph and sentence found above.

The cities of Pomona, Colton, Chino, Riverside, Redlands, Norco and Jurupa Valley have all instituted some form of warehouse moratorium mainly to protect people from harmful diesel truck pollution — especially children, the elderly and pregnant women. Some may initially be only 45 days to allow staff to develop wording for a longer moratorium.

The least Moreno Valley can do is not site warehouse projects with their harmful diesel trucks near people's homes.

Please keep me informed of meeting and documents related to this project.

Sincerely,

George Hague
Sierra Club
Moreno Valley Group
Conservation Chair

From:	Julia Descoteaux
To:	Catherine Lin
Subject:	Fwd: Cottonwood & Edgemont Warehouse
Date:	Wednesday, March 1, 2023 12:27:30 PM

See attached

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Julia Descoteaux
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3209 | e: juliad@moval.org w: www.moval.org
14177 Frederick St., Moreno Valley, CA, 92553

From: Julia Descoteaux <juliad@moval.org>
Sent: Wednesday, March 1, 2023 12:26:57 PM
To: Ann McKibben <atmckibben@roadrunner.com>
Cc: City Clerk <cityclerk@moval.org>
Subject: Re: Cottonwood & Edgemont Warehouse

Ms. McKibben,
Thank you for your comments.

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From: Ann McKibben <atmckibben@roadrunner.com>
Sent: Wednesday, March 1, 2023 11:48:56 AM
To: Julia Descoteaux <juliad@moval.org>
Cc: City Clerk <cityclerk@moval.org>
Subject: Cottonwood & Edgemont Warehouse

27 February 2023

Julia Descoteaux
Planning Department
City of Moreno Valley
14177 Frederick Street
Moreno Valley, CA 92552

Via email: juliad@moval.org

Dear Ms. Descoteaux:

Re: Cottonwood & Edgemont Warehouse—No Support

It is disappointing to see the city work to place large warehouses next to homes, adjacent to homes, close to homes. It is disappointing to see the city put residents' health at risk, increase

truck traffic and denigrate the quality of life for those living nearby.

I do not support this project. Please notify me of all hearings and documents via my email address: atmckibben@roadrunner.com

Sincerely,

Ann McKibben

Ann McKibben
Moreno Valley, CA 92557

From:	Julia Descoteaux
To:	Sean P. Kelleher; Catherine Lin
Subject:	Fwd: PEN21-0325, PEN21-0326, TPM 38325 (PEN21-0327) Cottonwood / Edgemont
Date:	Wednesday, March 1, 2023 5:05:10 PM
Attachments:	image001.png

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Julia Descoteaux
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3209 | e: juliad@moval.org w: www.moval.org
14177 Frederick St., Moreno Valley, CA, 92553

From: Liao, William <WLiao@socalgas.com>
Sent: Wednesday, March 1, 2023 3:51:12 PM
To: Julia Descoteaux <juliad@moval.org>
Cc: SCG SE Region Redlands Utility Request <SCGSERegionRedlandsUtilityRequest@semprautilities.com>; Wildey, Paul L. <PWildey@socalgas.com>
Subject: PEN21-0325, PEN21-0326, TPM 38325 (PEN21-0327) Cottonwood / Edgemont

Hi Julia.

Just looked at PEN21-0325, PEN21-0326, TPM 38325 (PEN21-0327) Cottonwood / Edgemont. No real concerns at the moment. There is an existing 2” gas main extending into APN 263-190-015. We have an active order for its abandonment and should be on our way soon. Please help me ensure the owner/developer contacts USA / Dig Alert prior to any excavation activities so we can get our personnel out for Locate & Mark. Also, if owner/developer needs gas service, please have them contact our Builder Services site to begin the application process as soon as possible, at https://www.socalgas.com/for-your-business/builder-services.

Please let me know if you have any questions.

Will Liao
Region Planning Supervisor
Redlands HQ / Southeast Region
Desk: 213-244-4543
Mobile: 562-889-1981


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Pharmacies
ATMs
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Ruben's Tires
Tire shop
Brill Rd
Edgemont St
Edgemont St
Edgemont St
Google
Imagery ©2023 County of San Bernardino, Maxar Technologies, U.S. Geological Survey, USDA/F

From:	Julia Descoteaux
To:	Catherine Lin; Sean P. Kelleher
Subject:	Fwd: Edgemont & Cottonwood IS/MND response
Date:	Wednesday, March 1, 2023 5:05:07 PM
Attachments:	moval_cottonwood_ismnd_1mar23.pdf

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Julia Descoteaux
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3209 | e: juliad@moval.org w: www.moval.org
14177 Frederick St., Moreno Valley, CA, 92553

From: Marven Norman <marven.n@ccaej.org>
Sent: Wednesday, March 1, 2023 4:40:03 PM
To: Planning Email_DG <planningemail@moval.org>
Cc: Sean P. Kelleher <seanke@moval.org>
Subject: Fwd: Edgemont & Cottonwood IS/MND response

Hello,

My email to Julia below received an automatic reply indicating that she will not be returning until March 7 so I wanted to make sure that this email and letter are received today.

Cheers,
Marven E. Norman (he/him/his), Policy Coordinator
Center for Community Action and Environmental Justice
Centro de Acción Comunitaria y Justicia Ambiental
| C: (951) 543-1743 | E: marven.n@ccaej.org | W: https://www.ccaej.org

---------- Forwarded message ---------
From: **Marven Norman** <marven.n@ccaej.org>
Date: Wed, Mar 1, 2023 at 4:24 PM
Subject: Edgemont & Cottonwood IS/MND response
To: <juliad@moval.org>
Cc: George Hague <gbhague@gmail.com>

Hi Julia,

Please find attached a letter from CCAEJ responding to the IS/MND for the proposed Edgewood & Cottonwood project which was made available for review and comment. An acknowledgement of receipt of this comment would be appreciated.

Cheers,
Marven E. Norman (he/him/his), Policy Coordinator
Center for Community Action and Environmental Justice

Centro de Acción Comunitaria y Justicia Ambiental
| C: (951) 543-1743 | E: marven.n@ccaej.org | W: https://www.ccaej.org

February 27, 2023

City of Moreno Valley
Attn: Julia Descoteaux, Senior Planner
14177 Frederick Street
Moreno Valley, CA 92552

Submitted via email to juliad@moval.org.

Re: Cottonwood & Edgemont Initial Study/Mitigated Negative Declaration

Dear Julia Descoteaux,

On behalf of Moreno Valley community members, this letter is in response to the Initial Study/MND for the proposed Cottonwood & Edgemont Project (SCH #2023020234) that would be constructed on an approximately 7.95 acre site there in Moreno Valley. After reviewing the documents and other information, we are opposed to the construction of this facility.

It is concerning to see that this Project is being proposed right in the middle of an existing community and barely half a mile from Edgemont Elementary School. The community is already one of the most polluted in the state, with the census tract where it is located being ranked at the 99th percentile overall 95th percentile for pollution burden in CalEnviroScreen 4.0. This project will greatly increase truck traffic and therefore diesel pollutants, causing severe health impacts because it has been strategically imbedded within this community which is already defined by the EPA as being in extreme nonattainment for air quality measures such as $PM_{2.5}$.

We believe that this project is in direct violation of California government code §65040.12(d)(2) because it concentrates industrial uses in proximity to schools and residential dwellings within an already overburdened environmental justice community. Furthermore, government code §65302 (h)(1) identifies considerations to reduce compound health risk to environmental justice communities "by means that include…reduction of pollution exposure." The placement of yet another warehouse in the community is in diametric opposition to that requirement.

To make matters worse, due to a size of only 49,815 square feet for each building (for a total of 99,630 square feet for both), the warehouses both individually and collectively fall below the threshold of the SCAQMD's Indirect Source Rule ("ISR") which is set at 100,000 square feet, thus allowing this Project to slip through the cracks on being held accountable. Thus, this Project would be adding to the cumulative burden in the community, worsening what is already one of the worst situations in the state. We view this as unacceptable and would urge the City to not move forward with further approval of the Project, but instead return to the drawing board to identify reduction of pollution exposure.

Thank you for your time and attention to receiving these comments. If there are any questions or comments, please do not hesitate to contact us for clarification.
Sincerely,

Ana Gonzalez

Ana Gonzalez
Executive Director

CC: Sierra Club

CCAEJ is a long-standing community based organization with over 40 years of experience advocating for stronger regulations through strategic campaigns and building a base of community power. Most notably, CCAEJ's founder Penny Newman won a landmark federal case against Stringfellow Construction which resulted in the `Stringfellow Acid Pits' being declared one of the first Superfund sites in the nation. ***CCAEJ*** prioritizes community voices as we continue our grassroots efforts to bring lasting environmental justice to the Inland Valley Region.

Mailing Address
P.O. Box 33124
Jurupa Valley CA 92519

Physical Address
3840 Sunnyhill Drive, Suite A
Jurupa Valley CA 92509

Tel: **951-360-8451**
Fax: 951-360-5950
www.ccaej.org

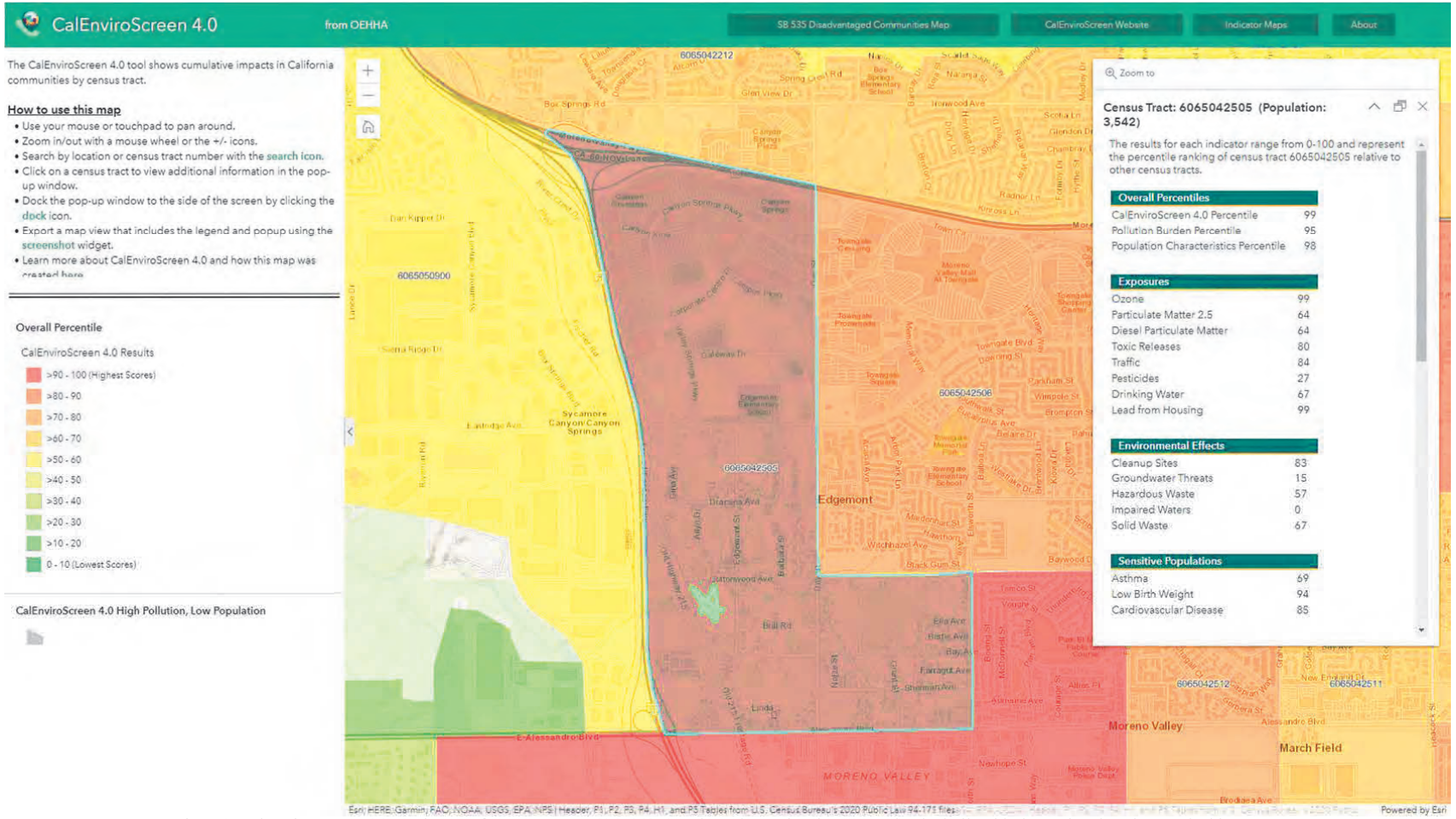


Figure1: CalEnviroScreen 4.0 results map for census tract 6065042505 where the Project is proposed to be built with the Project location marked in green.

Mailing Address
P.O. Box 33124
Jurupa Valley CA 92519

Physical Address
3840 Sunnyhill Drive, Suite A
Jurupa Valley CA 92509

Tel: **951-360-8451**
Fax: 951-360-5950
www.ccaej.org

Community Development
Department
Planning Division

March 1, 2023

Julia Descoteaux
Senior Planner
Community Development Department
141777 Frederick Street
PO Box 88005
Moreno Valley, CA 92552

Subject: City of Riverside's Review of a Notice of Intent to Adopt a Mitigated Negative Declaration for the Cottonwood & Edgemont Project

Dear Ms. Descoteaux:

Thank you for the opportunity to comment on the Notice of Intent to adopt a Mitigated Negative Declaration for the Cottonwood & Edgemont Project. The City of Riverside (City) understands that the proposed Cottonwood & Edgemont project consists of a Master Plot Plan (PEN21-0325), Plot Plan (PEN21-0326), and Tentative Parcel Map No. 38325 (PEN21-0327) to allow for the development of two light industrial buildings with a total combined building floor area of approximately 99,630 square feet. The City also understands that the project includes cargo loading areas at each building along with additional site improvements.

The City has reviewed the project documents, and we wish to provide the following comments:

Community and Economic Development Department – Planning Division:

- Master Plot Plan (PEN21-0325) and Plot Plan (PEN21-0325) should conform with the City's 2020 Good Neighbor Guidelines (GNG-2020) for Siting and New and/or Modified Industrial Facilities and implementing Zoning regulations to the greatest extent possible. The nearest sensitive receptors within the City of Riverside are established residential uses located west of Old 215 Frontage Road at approximately 385 linear feet from the project site property line. Other sensitive uses likely exist closer to the project site within the City of Moreno Valley and should be given similar consideration to protect the public health, safety and welfare.

CITY OF RIVERSIDE GOOD NEIGHBOR GUIDELINES (riversideca.gov)

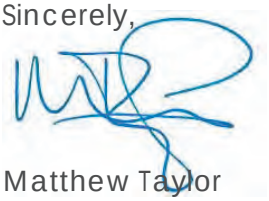
Public Works Department – Traffic Engineering Division:

- Based on the Transportation Study, the City does not have a fair share program. The applicant should pay for the full cost of improvements as recommended by the Traffic Study including:
    - On Old 215 Frontage Road & Eucalyptus Avenue:
        - Installation of South Bound Right Turn Overlap at Old 215 Frontage & Eucalyptus
        - Installation of North Bound dual left turn lanes and extend storage length at Old 215 Frontage & Eucalyptus
    - Installation of Traffic Signal at Old 215 Frontage Road & Bay Avenue
- We request conceptual plans to assess feasibility of the proposed improvements included in the Traffic Analysis Report. The Traffic Engineering Division is happy to meet and discuss improvements with the applicant and City of Moreno Valley.

The City of Riverside appreciates your consideration of the comments provided in this letter. Please forward any future environmental correspondence related to the Cottonwood & Edgemont project to the City of Riverside Planning Division. Should you have any questions regarding this letter, please contact Scott Watson, Historic Preservation Officer, at (951) 826-5507, or by e-mail at swatson@riversideca.gov.

We thank you again for the opportunity to provide comments on this proposal and look forward to working with you in the future.

Sincerely,



Matthew Taylor
Principal Planner

cc: Patricia Lock Dawson, Mayor
Riverside City Council Members
Mike Futrell, City Manager
Rafael Guzman, Assistant City Manager
Jennifer Lilley, Community & Economic Development Director
Maribeth Tinio, City Planner
Gilbert Hernandez, Public Works Director
Phaedra Norton, City Attorney

From:	George Hague
To:	Julia Descoteaux
Cc:	Sean P. Kelleher; City Clerk
Subject:	Additional Comments on Cottonwood & Edgemont warehouse Mitigated Negative Declaration (MND) -- 6
Date:	Wednesday, March 1, 2023 5:29:03 PM

Good evening Ms Descoteaux, March 1, 2023

Re: Additional comments on the Cottonwood & Edgemont (C&E) warehouse Mitigated Negative Declaration (MND)

As was fully explained in Sierra Club's February 24, 2023 email with comments on the C&E warehouse this project is really not two separate warehouses but is a single project with 99,630 sq/ft of warehousing. The C&E warehouse project needs to be treated just like the Edgemont Commerce Center (ECC) that is currently preparing the required EIR for their 142,345 sq ft warehouse project. The city's ECC's notice of Preparation of a Draft Environmental Impact Report reads in part as follows:

> **"PEN21-0125 (Change of Zone)** would amend the City of Moreno Valley Zoning Map to change the zoning designation of existing Assessor Parcel Numbers 263-230-004 and 263-230-025 from "Business Park" to "Light Industrial." The proposed Change of Zone is needed to develop a warehouse building that is larger than the 50,000 square feet (s.f.) that is allowed by right under existing zoning."
>
> "The EIR will assess the effects of the Project on the environment, identify potentially significant impacts, identify feasible mitigation measures to reduce or eliminate potentially significant environmental impacts, and discuss potentially feasible alternatives to the Project that may accomplish basic objectives while lessening or eliminating any potentially significant Project- related impacts."

The above information shows that the change of zone to accommodate a warehouse building of greater than 50,000 sq feet makes it necessary to produce an EIR. The information also shows that a zone change is needed from Business Park (BP) to Light Industrial (LI) which is also explained in our letter of February 24th. The C&E proposing two warehouses with each just under 50,000 sq ft is a poor attempt to avoid producing an EIR to provide much needed analysis/information on the project's almost 100,000 sq ft of warehousing near family homes. The city's attempt to make the lands for the C&E project as more than BP is also shown to be false by what they required for the ECC warehouse located not too far from the C&E warehouse and on the same city zoning of BP.

The city needs to be consistent and require a full EIR on the C&E's almost 100,000 sq ft of warehousing near family homes.

The South Coast Air Quality Management District (SCAQMD) sent the city a five page comment letter dated August 12, 2022 during the NOP stage of this project. That letter can be read in this link
http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2022/august/RVC220809-04.pdf

The C&E's MND does a very poor job of implementing their recommendations. The city must require many more of them in our non-attainment area or we will all suffer the consequences.

The proposal mentioned on page two to vacate the public right-of-way for Old 215 (395) Frontage Road is a very poor idea and will cause problems in the future because we will not have these important 17 feet. In fact it is a gift of what should remain with the public and which will be encroached upon by the project if we release it. We should have been told what portion of an acre this gift represents. The city has already given too many right-of ways to developers which has caused safety issues with the reduction in east west flow of traffic in our city. Further analysis of this gift needs to be done — with public input.

The C&E's proposed plans for Electric Vehicle (EV) charger is inadequate for all types of vehicles. No EV charger will be available when the project becomes operational. Not only should there be at least 10% of all car/van parking places with working EV chargers, but at least half of those need to be quick chargers.

All outdoor cargo handling equipment such as but not limited to forklifts, yard goats, pallet jacks, and hostlers must be zero emission. Writing they "Expect" not to use diesel but instead use other polluting petroleum products like gasoline or natural gas cannot be accepted in our non-attainment area. The project must be required to have sufficient charging places for all equipment. There also needs to be at last one operational charging location for big rig class 8 trucks and locations with infra-structure for others. With sufficient solar all of these vehicles and equipment would most of the time be running on sunshine.

Each truck dock (loading bays) must have plug-ins for electric Auxiliary Power Units (APU). There must be signs indicating that diesel APU's may not operate for more than a total of 5 minutes. Plug-ins for Transportation Refrigeration Units (TRU) for all truck docks must be required for the possible 10 % cold storage/refrigeration that is proposed.

Ornamental trees an inadequate and do nothing to filter the diesel pollution or reduce noise as well as light/glare pollution. The project must be required to have evergreen trees that are in double overlapping rows with a wide enough spread that makes a solid wall of evergreen trees to filter diesel and other pollutions as well as limit some noise and light/glare pollution. The trees need to be able to grow to 45ft to 50ft and allowed to reach full width and height as they grow to maturity.

In order for the C&E to develop these lands with a warehouse instead of the many other possible uses, there is a need for significant offsite improvements. The MND analysis of direct, indirect, cumulative and growth inducing impacts is inadequate for this part of the project. A full EIR must be required so the public and decision makers have the information necessary to more fully understand impacts and to make comments as well as suggest mitigations. Will existing users of water in this area be impacted and is there a possibility that water pressure will change to such an extent that lines to home could burst? Who will be responsible for impacts to homes/businesses? The water company doesn't have the money and therefore the developer must have signed an agreement to cover all costs related possible water impacts which must include replacing equipment and no gap of water availability.

The proposed 10 % cold storage/refrigeration means the building will probably be taller and noisier during the project's 24/7/365 night and day operation. These additional impacts needs

to be more fully analyzed and addressed in mitigations/conditions of approval.

During Construction off road equipment must be required to be Tier IV or better with no diesel generators allowed. At the very least a minimum of 80% must meet Tier IV in our non-attainment area.

The MND reads as follows: "At this location, the maximum incremental **cancer risk attributable to Project** construction and operational DPM source emissions is **estimated at 8.88 in one million, which is less than the threshold of 10 in one million.** At this same location, non-cancer risks were estimated to be 0.03, which would not exceed the applicable threshold of 1.0. As such, the Project will not cause a significant human health or cancer risk to adjacent land uses as a result of Project construction and operational activity." (Page 43)

The above doesn't explain the current/future cancer risks to which this project will add its negative impacts to cause more cancer. That is because they are submitting a MND instead of an EIR. We need the cumulative impacts that the nearby families will face in terms of cancer causing pollution. Other projects, both current and foreseeable, need to be included such as the approval in December of the Moreno Valley Business Center warehouse and the Edgemont Commerce Center which is currently preparing an EIR. Both are in Edgemont along Day Street. The Old 215 Industrial Park also needs to be factored in. There are other projects and negative impacts which need to be added to this project's environmental analysis — to truly give the public and decision makers all the information they should have to help the families in this census tract. As can be seen below from CalEnviroScreen this neighborhood is already in the worst !% of California for pollution and other socio-economic impacts — they show this as being at the 99 Percentile.

CalEnviroScreen

Overall Percentiles	
CalEnviroScreen 4.0 Percentile	99
Pollution Burden Percentile	95
Population Characteristics Percentile	98

Again the Project tries to convey they will not have a significant impact on Greenhouse Gas (GHG) emissions which again is a MND's inadequate analysis and needs to be part of a full in EIR

The C&E's Greenhouse Gas (GHG) MND reads as follows: "Additionally, as part of the adoption of General Plan 2040, the City adopted a Climate Action Plan (CAP). The CAP establishes an inventory of the City's baseline (year 2018) GHG emissions, quantifies the City's long-term GHG emissions, and establishes the measures the City will implement – including requirements for new development projects to be energy efficient – to achieve the year 2030 GHG emissions reduction goals of SB 32 as well as additional GHG emissions through the General Plan's horizon year (2040). As demonstrated by the analysis below, the Project would not conflict with the provisions of SB 32, and, therefore, would neither conflict with the CAP nor hinder or delay the City's ability to meet the GHG emissions reductions targets that are outlined in the

CAP." (page 59 C&E's MND)

Moreno Valley's current Climate Action Plan (CAP) is inadequate and doesn't meet state standards. In fact the city has been providing a warning to developers to proceed with their projects at their own risk because both the General Plan Update (GPU) and CAP are currently under litigation. Therefor the paragraph found above cannot be used for any cover/justification for this project's GHG and other impacts. The C&E's GHG analysis is inadequate because the current Moreno Valley CAP doesn't satisfy CEQA Guidelines section 15183.5(b).

The MND reads as follows that the project's impacts will be "less than significant with mitigations incorporated." "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" (page 83 MND) The problem is that there are very limited onsite mitigations required or even suggested. Off-site mitigations or donations to groups whose mission its is to protect this loss habitat/foraging area needs to be seriously considered — other than the Sierra Club which cannot take such from a litigation.

The C&E's Appendix J on Noise measurement location shown on page 29 are bogus for measuring impacts to nearby structures. The structure at the SW may or may not have people, but needs to have a sensor because trucks will be passing 24/7/365 days and nights. There are many other nearby structures shown that also needed to be part of noise measurement locations. Without those being added the noise study is totally inadequate and cannot be relied upon to provide the much needed information.

Sensitive Receptor locations shown on Page 43 of Appendix J is where more measurements should have been taken, but even then there is a structure between receptor #5 and the project that should have been included even if it doesn't currently have people. Those Receptors between #1 and #2 also needed to be included for noise measurements. Resident one is only 17 feet away and Resident 2 is only 19 feet away — this information is on pages 41 and 42 of Appendix J.

Table 10-2 on page 58 of Appendix J shows several scenarios when noise exceeds even our city's less than stringent standards. The analysis tries to use 200 feet as the standard as showing everything is okay, but all the five family homes as well as the church are much closer than 200 feet. Again this points another problem with the noise study.

The Sierra Club appreciates being given the opportunity to provided the six emails with comments on the Cottonwood and Edgemont warehouse project during the less than 20 days after being directly noticed. We find it sad and less than genuine for the city to have already scheduled the Planning Commission meeting on March 9th which is only about one week from the March 1st MND comment deadline for this email and probably only a few days before providing the public as well as the Planning Commissioners with the staff report and related documents. How are you incorporating all the needed suggestions/mitigations that have been made and needed for this project's impacts because of its close location to homes. The homes are legal and may be non-conforming only because the city changed the zoning on which they were legally built.

Please keep the Sierra Club informed of all meetings and documents related to this project.

Sincerely,

George Hague

Sierra Club

Moreno Valley Group

Conservation Chair

From:	Julia Descoteaux
To:	Sean P. Kelleher; Catherine Lin
Subject:	Fwd: Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration for the Plot Plans (PEN21-0325, PEN21-0326) Tentative Parcel Map 38325 (PEN21-0327) Project
Date:	Wednesday, March 1, 2023 5:39:56 PM
Attachments:	image004.png image001.png

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Julia Descoteaux
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3209 | e: juliad@moval.org w: www.moval.org
14177 Frederick St., Moreno Valley, CA, 92553

From: Cunningham, Kevin <kcunning@RIVCO.ORG>
Sent: Wednesday, March 1, 2023 5:30:38 PM
To: Julia Descoteaux <juliad@moval.org>
Cc: Sawyer, Heath <HSawyer@Rivco.org>
Subject: Notice of Intent to Adopt an Initial Study/Mitigated Negative Declaration for the Plot Plans (PEN21-0325, PEN21-0326) Tentative Parcel Map 38325 (PEN21-0327) Project

Hi Julia,

This email is in response to the Notice of Intent to adopt the Initial Study/Mitigated Negative Declaration prepared for Plot Plans (PEN21-0325, PEN21-0326) and Tentative Parcel Map 38325 (PEN21-0327) Project (Project). The Project consists of constructing two light industrial buildings with a total combined building floor area of approximately 7.94-gross-acre property. The Project would include loading docks, parking areas, landscaping, bio-basins, signage, and lighting. The Project would also include construction or improvement of infrastructure, including storm drain improvements, necessary to service the Project. The Riverside County Flood Control and Water Conservation District (District) has reviewed the Initial Study/Mitigated Negative Declaration (IS/MND) and has the following comments regarding the project:

1. The Project proposes to construct onsite storm drain facilities and new offsite public storm drain facilities within a segment of the Old 215 Frontage Road, abutting the western side of the Project site. These facilities may require connection to the District's Edgemont Channel, which is located northwest of the Project. Edgemont Channel may be considered "Waters of the United States" (WoUS). Work that impacts WoUS may require a permit from United States Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) in order to comply with Section 404/401 of the Clean Water Act (CWA). The discussion in the IS/MND should be updated to discuss the Project's potential to impact WoUS, and the need for permits from the USACE and RWQCB prior to adoption of this IS/MND.

2. Edgemont Channel may also be considered jurisdictional streambed to the California Department of Fish and Wildlife (CDFW). Impacts to CDFW jurisdictional streambed require a notification for Lake or Streambed Alteration to be submitted to CDFW. The IS/MND should be updated with a discussion on impacts to potentially jurisdictional streambed, and the need for a Streambed Alteration prior to adoption of this IS/MND.

Please be advised that any work involving District right-of-way, easement or facilities will require an

encroachment permit from the District and the need for permits from CDFW, USACE and RWQCB will need to be addressed prior to issuance of the encroachment permit. To obtain further information on the encroachment permit application and issuance process, please contact Devraj Oza of the Encroachment Permit Section at 951.955.1266.

Thank you for the opportunity to review the MND. If you have any questions or need additional information regarding the comments on this letter, please contact Heath Sawyer at 951.955.3134 or hsawyer@rivco.org or me at 951.955.1526.

Thank you,

Kevin Cunningham | Environmental Project Manager
Environmental Regulatory Services II
Riverside County Flood Control & Water Conservation District
1995 Market Street, Riverside, CA 92501
O: 951.955.1200 | D: 951.955.1526 | F: 951.788.9965
Office hours: Tu-Th, 7:45 AM – 6:30 PM; Fri, 7:45 AM – 5:30PM

The District is hiring Associate and Senior Flood Control Planners!
Click here to learn more about current career opportunities, or join our interest list to be among the first to learn about upcoming opportunities.

From: Julia Descoteaux <juliad@moval.org>
Sent: Thursday, February 23, 2023 5:21 PM
To: Sawyer, Heath <HSawyer@Rivco.org>
Cc: Cunningham, Kevin <kcunning@RIVCO.ORG>
Subject: RE: Biological and Jurisdictional Reports for Plot Plans (PEN21-0325, PEN21-0326), Tentative Parcel Map 38325 (PEN21-0327)

Good afternoon Heath,

Attached please find the requested document. I have included the link below if you should need any additional documents.

Best regards,
Julia

https://moval.gov/cdd/documents/about-projects.html

Julia Descoteaux
Senior Planner
Community Development
City of Moreno Valley
p: 951.413.3209 | e: juliad@moval.org w: www.moval.org
14177 Frederick St., Moreno Valley, CA, 92553

From: Sawyer, Heath <HSawyer@Rivco.org>
Sent: Thursday, February 23, 2023 5:16 PM
To: Julia Descoteaux <juliad@moval.org>
Cc: Cunningham, Kevin <kcunning@RIVCO.ORG>
Subject: Biological and Jurisdictional Reports for Plot Plans (PEN21-0325, PEN21-0326), Tentative Parcel Map 38325 (PEN21-0327)

Julia Descoteaux,

My name is Heath Sawyer. I work for the Riverside County Flood control, Regulatory Division. I am reviewing the Mitigated Negative Declaration (MND) for the Cottonwood & Edgemont Project. I would like to review the Biological Resources Assessment (Technical Appendix B) and project associated Jurisdictional Report for the Cottonwood & Edgemont Project. Can you please provide the location where I may review these materials.

Thank you for your time.

Heath

Heath Sawyer| Assistant Flood Control Planner
Environmental Regulatory Services II
Riverside County Flood Control & Water Conservation District
1995 Market Street, Riverside, CA 92501
Office hours: Tu-Fri, 7:00 AM – 5:30 PM
951.955.3134
hsawyer@rivco.org

Confidentiality Disclaimer

County of Riverside California