CALIFORNIA ENERGY COMMISSION

CALIFORNIA NATURAL RESOURCES AGENCY

California Energy Commission

STAFF REPORT

Localized Health Impacts Report

Support of Federal Contract HQ0845-22-9-0065 (Naval Base San Diego)

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California Energy Commission

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PREFACE

This Localized Health Impacts Report (LHI Report) assesses the local health impacts from projects proposed to receive Clean Transportation Program (CTP) or similar funding. Preventing or minimizing health risks from pollution is vital in any community, but it is especially important for communities that are at high risk due to preexisting poor air quality and other factors. Environmental justice (EJ) communities, low-income communities, and minority communities are considered the most impacted by any project that could increase air pollution. Therefore, they are considered "high-risk communities." This LHI Report:

- Identifies proposed projects located in high-risk communities.
- Analyzes the potential health impacts to communities from project-related emissions or pollution, based on information submitted by the project awardees.
- Describes the plans for community outreach for each project.

Assembly Bill 118 (Núñez, Chapter 750, Statutes of 2007), which created the CTP, also directed the California Air Resources Board (CARB) to develop guidelines to ensure the CTP improves air quality. CARB's *AB 118 Air Quality Guidelines*, approved in 2008, are published in the California Code of Regulations (CCR), Title 13, Motor Vehicles, Chapter 8.1. Those guidelines require the CEC to issue LHI Reports (13 CCR Section 2343):

"(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

"(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

"(B) Projects must be selected and approved for funding in a publicly noticed meeting."

In addition, the CEC issues LHI Reports for certain projects that are similar to CTP projects but do not receive CTP funding.

This LHI Report is made publicly available at least 30 days before projects are approved at a publicly noticed meeting. This report includes projects that may require a conditional-use permit, discretionary permit, or California Environmental Quality Act (CEQA) review. The CEC interprets "permits" to suggest discretionary and conditional-use permits, because they require a review of potential impacts to communities and the environment before issuance. Since ministerial-level permits do not review public health–related pollutants, CEC staff does not assess projects requiring only ministerial-level permits in this report.

ABSTRACT

This Localized Health Impacts Report describes the potential health impacts to communities from the project seeking California Energy Commission (CEC) grant funding to support U.S. federal contract HQ0845-22-9-0065. This initiative seeks to expand the supply of electric vehicle charging at Naval Base San Diego in California. Under California Code of Regulations Title 13, Section 2343, this report is available for public comment for 30 days before the approval of projects at a publicly noticed business meeting.

CEC staff proposes to add Clean Transportation Program or similar grant funding to this project. Based on project site information provided by the awardee, the community where this project is located is not considered a high-risk community. Further, staff does not anticipate a net increase in the pollution burden for the community where this project is located. Instead, staff expects the project to reduce pollution levels.

Keywords: Air pollution, California Air Resources Board (CARB), Assembly Bill (AB) 118, Budget Act of 2021, California Environmental Quality Act (CEQA), electric vehicles (EVs), electric vehicle supply equipment (EVSE), environmental justice (EJ) indicators, Environmental Justice Screening Method (EJSM), localized health impacts (LHI), military

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EXECUTIVE SUMMARY

The California Energy Commission's (CEC's) Clean Transportation Program provides funding to support innovation and accelerate the development and implementation of advanced transportation and fuel technologies. The CEC also provides funding for similar projects from programs that are similar to but separate from the Clean Transportation Program. An example of a similar program is the funding described in Section 74 of the Budget Act of 2021 (Senate Bill 129, Skinner, Chapter 69, Statutes of 2021).

Under California Code of Regulations Title 13, Section 2343, this Localized Health Impacts Report describes the military electric vehicle charger project proposed for funding that may require a conditional or discretionary permit or environmental review. These permits include conditional-use permits, air-quality permits, wastewater permits, hazardous waste disposal permits, and other land-use entitlements. Since ministerial-level permits do not assess public health–related pollutants, staff does not assess projects requiring only ministerial-level permits in this report.

The CEC is required to assess the local health impacts of projects proposed for Clean Transportation Program funding. This report focuses on the potential health impacts to communities from project-related emissions or pollution. Environmental justice communities, low-income communities, and minority communities are considered to be at higher risk of adverse health impacts from pollution. Project locations in these communities are considered "high-risk community project locations." High-risk communities are identified using demographic data with environmental data for air quality from the California Air Resources Board.

CEC staff proposes to add Clean Transportation Program or similar grant funding to an existing competitively awarded federal contract, HQ0845-22-9-0065. This initiative seeks to expand the supply of electric vehicle charging at Naval Base San Diego in California. Staff analyzes localized health impact information submitted by the project awardee. Based on project site information provided by the awardee, the community where the proposed project is located is not considered high-risk. Staff also does not anticipate a net increase in the pollution burden for the communities where this project is located. Instead, staff expects the project to reduce pollution levels.

CHAPTER 1:
Project Proposed for Funding

Background

Assembly Bill 118 (Núñez, Chapter 750, Statutes of 2007) created the Clean Transportation Program (CTP, originally called the "Alternative and Renewable Fuel and Vehicle Technology Program"). Assembly Bill 118, amended by Assembly Bill 109 (Núñez, Chapter 313, Statutes of 2008), authorizes the CEC to "develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies." Assembly Bill 8 (Perea, Chapter 401, Statutes of 2013) reauthorizes the CTP to January 1, 2024.

Section 74 of the Budget Act of 2021 (Senate Bill 129, Skinner, Chapter 69, Statutes of 2021) provides additional funding for the expansion of charging infrastructure. Senate Bill 170 (Skinner, Chapter 240, Statutes of 2021), which amends the Budget Act of 2021, adds additional provisions for this funding. Section 40, 1, (a) of Senate Bill 170 states:

"The commission may add these funds to existing competitively awarded agreements if existing competitive agreements are consistent with the use of funds defined in Provision 4 of this item."

The Defense Innovation Unit under the U.S. Department of Defense has competitively awarded contract number HQ0845-22-9-0065 to TechFlow, Inc. (TechFlow). Under this contract, TechFlow will install electric vehicle (EV) charging equipment at Naval Base San Diego. The CEC proposes to add funds to this existing competitively awarded federal contract. The contract will support Naval Base San Diego in switching from fossil-fueled vehicles to EVs, which will reduce criteria air pollutants and greenhouse gas (GHG) emissions in California.

Project Selected

This LHI Report assesses the location of this project. Table 1 lists the proposed project location and its corresponding environmental justice (EJ) indicators. EJ indicator definitions are in Chapter 2 of this LHI Report, and EJ indicator analysis is in Table 2.

Table 1: Project Details Along With EJ Indicators

Proposed Awardee	Project Title	Project Location	EJ Indicator(s)
TechFlow, Inc.	TechFlow Military EV Chargers	3455 Senn Rd, San Diego, CA 92136	Minority

Source: CEC staff

Funding for this project is contingent upon approval at a publicly noticed CEC business meeting and execution of a grant agreement.

Project Description

The proposed funding recipient, TechFlow, provided LHI information for the proposed project and location. This information includes the expected impact of the project on local communities and the outreach efforts the applicant has made to engage disadvantaged

communities or other local communities. This section summarizes that information submitted by the awardee. TechFlow identifies disadvantaged communities using the CalEnviroScreen[1] screening tool developed by the Office of Environmental Health Hazard Assessment.

TechFlow's project, titled "TechFlow Military EV Chargers," will install EV chargers at Naval Base San Diego. This will include both Level 2 chargers and direct-current fast chargers (DCFCs). Chargers will be open to both government-owned vehicles and personal vehicles. TechFlow did not provide detailed information about health impacts, citing Department of Defense confidentiality needs. However, TechFlow expects that the project will not directly generate emissions. Further, since it will allow increased use of EVs, TechFlow expects the project to reduce emissions overall.

TechFlow stated that, since the project is on a military base, no community outreach was planned besides engaging with Department of Defense stakeholders.

Public Comment

As provided by Title 13 of the CCR, Section 2343, a 30-day public review period applies to this LHI Report from the date it is posted on the CEC website. The original posting date for this report is at https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/localized-health-impacts-reports.

The CEC encourages comments by email. Please include your name or organization's name in the name of the file. Send comments in either Microsoft® Word format (.doc) or Adobe® Acrobat® format (.pdf) to FTD@energy.ca.gov.

The public can email comments to FTD@energy.ca.gov or mail a hard copy to:

California Energy Commission
Fuels and Transportation Division
715 P Street, MS-44
Sacramento, CA 95814-5512

All written comments will become part of the public record and may be posted to the Internet. News media should direct inquiries to the Media and Public Communications Office at 916-654-4989 or by email at mediaoffice@energy.ca.gov.

1 This tool ranks U.S. Census tracts based on geographic, socioeconomic, public health and environmental hazard criteria. See "CalEnviroScreen." Office of Environmental Health Hazard Assessment. Accessed November 30, 2022. Available at https://oehha.ca.gov/calenviroscreen.

CHAPTER 2:
Location Analysis

This LHI Report identifies projects located in high-risk communities, using staff's adaptation of the Environmental Justice Screening Method (EJSM).[2] High-risk communities are those with social vulnerability indicators, high exposure to pollution, and greater health risks. This LHI Report is not intended to be a detailed pollution analysis of proposed projects, nor is it intended to substitute for the environmental review conducted during CEQA.

CEC staff identifies high-risk community project locations using data from CARB, the U.S. Census Bureau, and other public agencies. The data are analyzed to assign EJ indicators for each project location specified in the LHI Report. The proposed project location must meet a two-part environmental and demographic standard to be considered in a "high-risk community."

Part 1: Environmental Standard

Communities meet the environmental standard if they have a high concentration of air pollutants. These pollutants include ozone, particulate matter 2.5 microns in diameter or smaller ($PM_{2.5}$), or particulate matter 10 microns in diameter or smaller (PM_{10}). The environmental standard uses CARB air quality monitoring data on nonattainment[3] status for these pollutants.

Using 2020 data,[4] the project is in a community that meets the environmental standard, since it is within a nonattainment zone for ozone, $PM_{2.5}$, or PM_{10}. This indicates that there may be existing poor air quality where the proposed project is located.

Part 2: Demographic Standard

Communities meet the demographic standard if they have two or more EJ indicators for minority, age, poverty, and unemployment. Staff defines the EJ indicator thresholds as:

1. A minority subset represents more than 30 percent of a given city's population.
2. The percentage of people living in a city who are younger than 5 years of age, or who are 65 years of age or older, is more than 1.2 times (more than 20 percent higher than) the state average for those age categories.
3. A city's poverty rate exceeds the state average poverty rate.

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2 Pastor Jr., Manuel (University of Southern California), Rachel Morello-Frosch (University of California, Berkeley), and James Sadd (Occidental College). 2010. *Air Pollution and Environmental Justice: Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*. California Air Resources Board.

3 A *nonattainment* area is a geographic area that does not meet the Ambient Air Quality Standards (state, national, or both) for a given pollutant. See "Maps of State and Federal Area Designations." California Air Resources Board. Accessed November 29, 2022. Available at https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.

4 Ibid.

4. The city (or county if city data are unavailable) unemployment rate exceeds the state average unemployment rate.

The demographic standard uses the U.S. Census Bureau's American Community Survey five-year estimates[5] on race, ethnicity, age, and poverty, and the California Employment Development Department's monthly data[6] on unemployment. Specifically, this LHI Report uses city-level[7] unemployment data. Unemployment data are not seasonally adjusted.

The community where this project is located does not meet the demographic standard, since it does not exceed the threshold for two or more EJ indicators (Table 2).

Analysis Results

Staff finds that the community where this project is located does not meet the criteria for high-risk communities, since it meets the environmental standard but not the demographic standard. In Table 2, a **bold** number followed by an asterisk (*) indicates categories that exceed a given EJ indicator threshold. A city/county name in **bold**, followed by a dagger (†), indicates a high-risk community.

Table 2: EJ Indicators by Project Location City Demographic

Site Location	American Indian and Alaska Native (2020)	Asian (2020)	Black or African American (2020)	Hispanic or Latino (Any Race) (2020)	Native Hawaiian and Pacific Islander (2020)	Under 5 Years of Age (2020)	65 Years of Age and Over (2020)	Below Poverty Level (2020)	Unemploy-ment (October 2022)
California	**0.8%**	**14.8%**	**5.7%**	**39.1%**	**0.4%**	**6.1%**	**14.3%**	**12.6%**	**3.8%**
EJ Indicator Threshold	**30%**	**30%**	**30%**	**30%**	**30%**	**7.3%**	**17.2%**	**12.6%**	**3.8%**
San Diego	0.5%	17.3%	6.1%	**30.1%***	0.4%	5.8%	13.3%	11.8%	3.0%

Sources: CEC staff, Employment Development Department, and U.S. Census Bureau.

5 American Community Survey codes DP05 and S1701 were used to find data. See "Explore Census Data." U.S. Census Bureau. Accessed November 29, 2022. Available at https://data.census.gov/cedsci/.

6 Overview page with data from most recent and previous months: "Unemployment Rate and Labor Force." Employment Development Department. Accessed November 29, 2022. Available at https://labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html.

7 Most recent data only: "Monthly Labor Force Data for Cities and Census Designated Places (CDP)." Employment Development Department. Accessed November 29, 2022. Available at https://labormarketinfo.edd.ca.gov/file/lfmonth/allsubs.xls.

Summary

If funded, the proposed project would result in an expanded supply of EV charging for Naval Base San Diego. This expansion will achieve emissions reductions by supporting military personnel in switching from fossil-fueled vehicles to EVs.

Based on EJSM standards, CEC staff does not consider the community where this project is located to be a high-risk community. Further, staff found no indication that the project would negatively affect community health. Staff does not anticipate a significant increase in local pollutants. In fact, these proposed projects may create a net benefit for the surrounding communities, by reducing harmful criteria air pollutants, toxic air contaminants, and greenhouse gases (GHGs) that contribute to climate change.

GLOSSARY

Term	Definition
California Code of Regulations (CCR)	The official compilation and publication of the regulations adopted, amended, or repealed by state agencies under the Administrative Procedure Act (APA). Properly adopted regulations that have been filed with the Secretary of State have the force of law.
California Environmental Quality Act (CEQA)	A statute that requires state and local agencies to identify the significant environmental impacts of their actions and avoid or reduce those impacts, if feasible.
CalEnviroScreen	A screening tool that evaluates and ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors, and prevalence of certain health conditions.
Criteria air pollutant	An air pollutant for which acceptable levels of exposure can be determined and for which the U.S. Environmental Protection Agency has set an ambient air quality standard. Examples include ozone (O_3), carbon monoxide (CO), nitrogen oxides (NO_x), sulfur oxides (SO_x), and particulate matter (PM_{10} and $PM_{2.5}$).
Direct-current fast charger (DCFC)	High-speed charger for electric vehicles. DC fast charging uses direct current (DC) and can provide more power than either Level 1 or Level 2 charging.
Disadvantaged community	A designation by the California Environmental Protection Agency used to identify areas disproportionately affected by environmental pollution or hazards, due to geographic, socioeconomic, public health, and environmental factors.
Electric vehicle (EV)	A vehicle that is powered partly or completely by electricity. This often refers to battery-electric vehicles, which have no engine and store all the energy in batteries. The term can also include other vehicle types, such as plug-in hybrids.
Environmental justice (EJ)	The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.
Environmental Justice Screening Method (EJSM)	An approach that combines environmental and demographic indicators to inform agency outreach and engagement practices regarding environmental justice.

Term	Definition
Level 1 charger	The slowest category of electric vehicle charger. Level 1 uses alternating current (AC) at standard North American household voltage (for example, 120 volts).
Level 2 charger	Medium-speed charger for electric vehicles. Level 2 uses alternating current (AC) at a higher voltage (for example, 240 volts) than Level 1, providing more power.
Localized health impacts (LHI)	Potential health impacts to communities.
Particulate matter (PM)	Any material besides pure water that exists in a solid or liquid state in the atmosphere. The size of particulate matter can vary from coarse, wind-blown dust particles to fine particles resulting from combustion.
$PM_{2.5}$	Particulate matter with particles 2.5 microns in diameter or smaller. Also called "fine particulate matter."
PM_{10}	Particulate matter with particles 10 microns in diameter or smaller. Also called "coarse particulate matter."
Toxic air contaminant	An air pollutant, identified in California Air Resources Board regulations, which may cause negative health effects even at very low concentrations.

Sources: California Air Resources Board, CEC Energy Glossary, University of Michigan School of Public Health, and U.S. Environmental Protection Agency