BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

APPENDIX E

CEQA Initial Study and Negative Declaration

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

California Environmental Quality Act

Initial Study and Draft Negative Declaration

Proposed Amendments to Regulation 2, Rule 1 Permits: General Requirements

Proposed Amendments to Regulation 2, Rule 5 Permits: New Source Review of Toxic Air Contaminants

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CHAPTER 1
Introduction

The Bay Area Air Quality Management District (Air District, BAAQMD, or District) is proposing amendments to its permitting regulation (Regulation 2: Permits) to make the rules within it more health protective, with an emphasis on improving air quality at the local level. Modifications are proposed to Regulation 2, Rule 1: General Requirements (Rule 2-1) and Regulation 2, Rule 5: New Source Review of toxic Air Contaminants (Rule 2-5). Under the California Environmental Quality Act (CEQA), the Air District is required to consider the potential for any significant adverse environmental impacts to result from the proposed amendments to Rule 2-1 and 2-5. Air District staff have, therefore, directed the preparation of this Initial Study pursuant to CEQA.

As explained in detail in Chapter 3, the Initial Study has found that the proposed amendments will not have any significant adverse environmental impacts. Air District staff is, therefore, proposing that the District's Board of Directors adopt a Negative Declaration under CEQA pursuant to Section 15074 of the CEQA Guidelines.

The Air District is publishing this Initial Study and draft Negative Declaration concurrently with the proposed amendments and detailed Final Staff Report explaining in more detail what the proposed amendments will entail. The public should review this Initial Study and proposed Negative Declaration in conjunction with those other documents in order to obtain a full understanding of the proposed amendments and their potential for adverse environmental impacts.

1.1 PURPOSE OF THIS DOCUMENT

The Initial Study is a preliminary assessment of the potential environmental impacts of the proposed project. The purpose of the Initial Study is to determine whether a Negative Declaration or Environmental Impact Report (EIR) must be prepared (CEQA Guidelines §15365). If the Initial Study determines that there is substantial evidence that any aspect of the project either individually or cumulatively, may cause a significant effect on the environment, then an EIR must be prepared. If the Initial Study determines that there is no substantial evidence that the project or any of its aspects may cause a significant effect on the environment, then a Negative Declaration should be prepared (CEQA Guidelines §15063(b)). As explained herein, this Initial Study has reached the second conclusion: that there is no substantial evidence that the proposed amendments to Rules 2-1 and 2-5 will have any significant adverse effect on the environment. Accordingly, the Air District has prepared a draft Negative Declaration. The Initial Study provides the documentation for the finding in the draft Negative Declaration that the project will not have a significant impact on the environment (CEQA Guidelines§15063(c)(5)).

The Negative Declaration is a written statement by the lead agency describing why the proposed project will not have a significant effect on the environment and, therefore, does not require the preparation of an EIR (CEQA Guidelines §15371). A Negative Declaration is prepared by Air District staff based on the analysis in the Initial Study, and then is proposed

for adoption by the District's Board of Directors. Air District staff provides notice to the public of the draft Negative Declaration and an opportunity to comment on it, and then the Board of Directors considers the Negative Declaration at a public hearing. The Board of Directors considers the Negative Declaration along with any public comments received, and then adopts (or certifies) the Negative Declaration if it finds, using its independent judgment and analysis, that based on the whole record – including the project description, Initial Study, any mitigation measures, and any public comments – that there is no substantial evidence that the project will have a significant effect on the environment (CEQA Guidelines §15074(b)).

1.2 SCOPE OF THIS DOCUMENT

This document evaluates the potential impacts of the proposed amendments on the following resource areas:

- aesthetics,
- agriculture and forestry resources,
- air quality,
- biological resources,
- cultural resources,
- energy,
- geology / soils,
- greenhouse gas emissions,
- hazards & hazardous materials,
- hydrology and water quality,
- land use and planning,
- mineral resources,
- noise,
- population and housing,
- public services,
- recreation,
- transportation,
- tribal cultural resources,
- utilities / service systems, and
- wildfires.

1.3 IMPACT TERMINOLOGY

The following terminology is used in this Initial Study/Negative Declaration to describe the levels of significance of impacts that would result from the proposed rule amendments:

- An impact is considered *beneficial* when the analysis concludes that the project would have a positive effect on a particular resource.

- A conclusion of *no impact* is appropriate when the analysis concludes that there would be no impact on a particular resource from the proposed project.

- An impact is considered *less than significant* if the analysis concludes that an impact on a particular resource topic would not be significant (i.e., would not exceed certain criteria or guidelines established by the District). Impacts are frequently considered less than significant when the changes are minor relative to the size of the available resource base or would not change an existing resource.

- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that an impact on a particular resource topic would be significant (i.e., would exceed certain criteria or guidelines established by the District), but would be reduced to a less than significant level through the implementation of mitigation measures.

1.4 ORGANIZATION OF THIS DOCUMENT

The content and format of this document, described below, are designed to meet the requirements of CEQA.

- Chapter 1, "Introduction," identifies the purpose, scope, and terminology of the document.

- Chapter 2, "Description of the Proposed Rule Amendments," provides background information on Rules involving Particulate Matter and attainment status history in the Bay Area, describes the proposed rule modifications and new rules, and describes the area and facilities that would be affected by the rule.

- Chapter 3, "Environmental Checklist," presents the checklist responses for each resource topic. This chapter includes a brief setting description for each resource area and identifies the impact of the proposed rule amendments on the resources topics listed in the checklist.

- Chapter 4, "References Cited," identifies all printed references and personal communications cited in this report.

- Appendix A, Emission Calculations, includes the detailed emission calculations for construction activities that may be required by the proposed new rule and rule amendments.

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CHAPTER 2

Description of the Proposed Rule Amendments

2.1 INTRODUCTION

The Air District is proposing amendments to Regulation 2 to make the rules within it more health protective, with a particular emphasis on improving localized air quality in currently overburdened communities. The Air District is proposing to amend Rule 2-5: New Source Review of Toxic Air Contaminants to be more stringent in overburdened communities and to update health risk assumptions used to calculate toxic air contaminant (TAC) impacts. In addition, the Air District is proposing amendments to Rule 2-1: General Requirements that would require additional public notification and increase the public comment period prior to issuance of certain air permits.

2.2 OBJECTIVES

- Reduce air quality impacts in AB617 communities and other areas overburdened by air pollution, poverty, economic injustice, and social injustice.
- Make the Air District's air toxics permitting rules more stringent, both Bay Area wide and in overburdened communities;
- Increase transparency of Air District permitting by providing additional public notice;
- Reduce exposure to TACs from new and modified sources of air pollution in communities that are overburdened by pollution or face health vulnerabilities at the community level that could contribute to residents being more susceptible to the detrimental health effects for air pollution; and
- Update the health risk screening methodologies.

2.3 BACKGROUND

2.3.1 RULE 2-1: GENERAL REQUIREMENTS

The Air District publishes information regarding permit applications on its website and provides public notifications and opportunities for public comment on several permit application types, one of which involves permit applications that will result in an increase in toxic air contaminants near schools. Rule 2-1: General Requirements states that the Air District must notify parents and guardians of children enrolled in the school or schools near which the source or sources will be located, as well as to each address near the source. The Air Pollution Control Officer is required to review and consider all comments received during the application period. The expense of the public notice process is borne by the permit applicant, in the form of a fee that is paid to the Air District to cover costs.

2.3.2 RULE 2-5: AIR TOXICS NSR PROGRAM

The Air Toxics NSR Program was established in 1987 at the direction of the Air District's Board of Directors and was initially implemented based on policies and procedures established by the Air District's Air Pollution Control Officer (APCO). In 2005, the Air District updated the Air Toxics NSR Program and codified the Air Toxics NSR policies and procedures in Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants, in the Manual of Procedures, Volume II, Part 4: New and Modified Sources of Toxic Air Contaminants, and in the BAAQMD Health Risk Assessment (HRA) Guidelines. When evaluating heath impacts from new and modified sources, the Air District follows the BAAQMD Health Risk Assessment (HRA) Guidelines, which generally conform to State Air Toxics Hot Spots Health Risk Assessment (HRA) guidelines. The California Office of Environmental Health Hazard Assessment (OEHHA) periodically revises the State HRA guidelines and has made some changes since the BAAQMD HRA Guidelines were updated in 2015. The last time Rule 2-5 was amended, at the end of 2016, the Air District updated the rule to include the most current OEHHA risk procedures for determining health risk from new and modified sources of toxic air contaminants. The updates to Rule 2-5 resulted in a 40% increase in estimated cancer risk for the same emission levels of most toxic air contaminants. For a dozen toxic air contaminants, the estimated cancer risk increased by up to a factor of five, based on the revised health risk assessment calculation methodology.

The goal of the Air Toxics NSR Program is to evaluate and mitigate potential increases in public health risks resulting from new and modified sources of toxic air contaminants based on preconstruction permit review. The program is also intended to reduce existing health risks by requiring updated control requirements when older, more highly polluting, sources are modified or replaced. Rule 2-5 contains health risk-based thresholds at which a new or modified source must employ Best Available Control Technology for Toxics (TBACT) and health risk limits that each project cannot exceed. The rule also delineates the procedures to be used for calculating toxic air contaminant emission increases from sources and projects and for evaluating the health impacts that result from these emission increases.

The stringency of the program is affected by both the methodology and the action levels. Stringency can be increased either by changes in methodology that result in a higher calculated risk or by reductions in the risk action levels. The proposed changes to Rule 2-5 include increased stringency through a reduction in risk action level in communities overburdened by higher levels of pollution or population vulnerability, as well as a change in the methodology for assessing health risk from gas stations, which will result in a higher calculated risk for projects involving gas stations.

2.4 BACKGROUND AND SUMMARY OF PROPOSED RULE AMENDMENTS

Due to a variety of factors, air quality in the Bay Area often varies between different locations. Air District staff has focused on reducing disparities in access to clean air for decades and developed programs that are specifically targeted to achieve reductions in air pollution in the Bay Area's communities that are overburdened by poor air quality, which can be compounded by exposure to other forms of environmental pollution and health vulnerabilities. Efforts by the Air District in conjunction with actions undertaken by other regulatory agencies and industries contributed to an overall decline of the average background cancer risk in the Bay Area. Air District modeling and monitoring data show that cancer-risk weighted air toxics trends are declining regionally, and that the most significant driver of air toxics emissions in the Bay Area come from mobile source emissions. Since 1990, the estimated lifetime cancer risk for Bay Area residents over a 70-year lifespan from all toxic air contaminant emissions combined declined from 4,100 cases to around 600 cases per million people today. Diesel particulate matter still accounts for the majority of toxic air contaminant emissions in the Bay Area and the majority of toxic emissions still result from mobile source emissions.[1]

Despite the positive overall trend, information obtained through the Air District's implementation of Assembly Bill 617 (AB 617) demonstrates the persistence of differences in exposure and vulnerability to air pollution. Even though carcinogenic toxic air contaminant emissions are declining, they still contribute to cancer risk in the region, and in some communities, cancer risk remains higher than other areas due to the existence of nearby roadways or stationary sources of air pollution over which the Air District holds permitting authority.

The purpose of the proposed rule amendments is to reduce exposure to toxic air contaminants from new and modified sources of air pollution in communities that are overburdened by pollution or face health vulnerabilities at the community level that could contribute to residents being more susceptible to the detrimental health effects from air pollution. The Air District is proposing to use data from CalEnviroScreen 4.0, which quantifies indicators of pollution burden and population characteristics to score communities based on cumulative impacts, to identify parts of the Bay Area where more stringent cancer risk limits and enhanced notifications could be justified on the basis of a cumulative impacts analysis. Additionally, the Air District intends to update the toxic new source review rule to ensure it reflects the latest advances in the science of air pollution health assessments. Further, Amendments to Rule 2-1 are being proposed to require enhanced notification in high-scoring CalEnviroScreen 4.0 communities.

[1]Workshop Report: Draft Amendments to Regulation 2: Permits, Rule 1: General Requirements and Draft Amendments to Regulation 2: Permits, Rule 5: New Source Review of Toxic Air Contaminants, July 2021.

2.4.1 CALENVIROSCREEN

CalEnviroScreen is the commonly used name for the California Communities Environmental Health Screening Tool, which is a mapping tool developed and maintained by the California Office of Environmental Health Hazard Assessment (OEHHA). CalEnviroScreen version 4.0 multiplies pollution burden by population characteristics within a census tract to determine an overall score for the census tract. CalEnviroScreen bases scores upon indicators, which fall into four different components—two that consider pollution burden, and two that consider population characteristics.

- Pollution burden indicator categories are exposures (e.g., exposure to ozone, $PM_{2.5}$, diesel PM emissions, drinking water contaminants, children's lead risk, pesticide use, toxics from stationary sources, and traffic impacts) and environmental effects (cleanup sites, groundwater threats, hazardous waste, impaired water bodies, and solid waste sites/facilities).
- Population characteristics indicator categories are sensitive populations and socioeconomic factors. Sensitive populations include asthma associated with emergency department visits, cardiovascular disease (emergency department visits for heart attacks), and low birth-weight infants. Socioeconomic factors include educational attainment, housing-burdened low-income households, linguistic isolation, poverty, and unemployment.

Air District staff evaluated CalEnviroScreen 4.0 scores in the Bay Area to determine the census tracts and probable locations of areas in which permitting requirements could be made more stringent in response to cumulative impacts. Staff examined census tracts with scores at or above the 75th percentile as well as tracts within the range of 70th through the 75th percentile.

The rationale for selecting scores at or above the 75th percentile comes from CalEPA's designation that "disadvantaged communities" as defined in Senate Bill 535 (De León, Chapter 830, Statutes of 2012) consisted of the highest scoring 25 percent of census tracts in CalEnviroScreen. Staff additionally included tracts in the 70th through the 75th percentiles for two reasons: first, that including these census tracts could be more inclusive of communities that face burdensome socioeconomic vulnerability; and second, that including these census tracts could make up for the fact that several census tracts that were previously identified as disadvantaged under CalEnviroScreen 3.0 have dropped off the top 25 percent list but continue to face many of the same pollution burdens or health vulnerabilities as before.

Using the categorization described above, staff found that, out of 1,552 total census tracts within the Air District's jurisdiction, 159 census tracts, or about ten percent of the total, would be considered as disadvantaged or overburdened based on CalEnviroScreen 4.0 scoring (see Table 2-1).

TABLE 2-1

≥70th Percentile CalEnviroScreen 4.0 Census Tracts by County

County	Total
Alameda	47
Contra Costa	44
Marin	1
Napa	0
San Francisco	17
San Mateo	10
Santa Clara	20
Solano	17
Sonoma	3
TOTAL	159

2.4.2 HEALTH RISK ASSESSMENT PROCEDURES

Gas stations account for more than one in five Air District-permitted facilities. Bay Area-wide, gas stations and other gasoline dispensing facilities (collectively referred to in this document as gas stations) make up anywhere between five to 15 percent of permitting health risk screening analyses. Gas station emissions include toxic air contaminants such as benzene that can pose health risks to nearby residents and workers. Under Rule 2-5, new gas stations and existing gas stations proposing modifications are required to apply for a permit from the Air District. During the review and evaluation of the permit application, the Air District performs a health risk assessment, which models cancer and non-cancer health risks based on various factors including the proposed project location, the proximity of nearby residents and workers, weather patterns, terrain, and emissions data.

Proposed revisions to the Air District's Health Risk Assessment Guidelines incorporate updates to the health risk assessment procedures for gasoline dispensing facilities, to be consistent with other permitted sources/facilities. In 2015, OEHHA approved and adopted updated Health Risk Assessment Guidelines (2015 Guidelines) that are used in the Air District's Health Risk Assessment Guidelines. Under this concept, the Air District would update and incorporate the 2015 Guidelines to its evaluation of new and modified gas dispensing facility projects. The 2015 Guidelines adjusted multiple additional factors used to prepare health risk assessments, including breathing rate assumptions, exposure frequency and exposure duration, that in combination will result in higher calculated risks. Fully incorporating all the 2015 OEHHA health risk calculation procedures will result in cancer risk estimates for residents that are about 40 percent higher than the current procedures and will add a new limit on acute impacts. While these changes would not prevent gas stations from renewing permits, they could result in some existing gas stations being unable to increase throughput, or they could reduce the amount of gasoline throughput that might otherwise be allowed for a new station. The inclusion of acute

health impacts in gas station risk assessment procedures could limit the number of dispensers or the maximum hourly pumping rate for new stations.

2.4.3 PUBLIC NOTIFICATION PROCEDURES

The Air District publishes information regarding permit applications on its website and provides public notifications and opportunities for public comment on several permit application types, one of which involves permits applications that will result in an increase in toxic air contaminants near schools. Rule 2-1: General Requirements states that the Air District must notify parents and guardians of children enrolled in the school or schools near which the source or sources will be located, as well as to each address near the source. Since 2009, the Air District has carried out an annual average of 72 public notifications for projects triggering the schools notification requirement.

2.5 PROPOSED RULE AMENDMENTS TO RULE 2-1: GENERAL REQUIREMENTS

Proposed changes to Rule 2-1 - General Requirements work in tandem with proposed changes to Rule 2-5. Rule 2-1 provides the framework for the Air District's permitting regulation, while other rules within the regulation (such as Rule 2-5) focus on specific elements of the permitting process. In Rule 2-1, a new provision that defines an Overburdened Community for the purpose of the Permitting Regulation is the basis for more stringent limits in Rule 2-5.

Modifications to Rule 2-1 also include new notification requirements for projects that are planned to be located in communities that are overburdened by environmental or health burdens. Although these changes alone will not increase the stringency of emissions limitations, they are intended to serve the purpose of providing greater transparency to the public.

2.5.1 PURPOSE

The purpose of the proposed amendments to Rule 2-1 is to provide more information to the public on active permit applications in communities that face environmental and health burdens. By making information more accessible to the public through physical mailing of information to residents and posting notifications on the Air District website, the Air District would provide more awareness of permit applications and the proposed projects. In addition, this change would include a written public comment period, which could enable members of the public to provide additional information for the Air District to consider in evaluating permit applications.

2.5.2 APPLICABILITY

Proposed amendments to Rule 2-1 that pertain to the new notification requirement for projects that require health risk assessments and are located in areas that have high CalEnviroScreen scores would be limited to a relatively small number of applications per year compared to the overall volume of applications that the Air District receives. However, to account for the proposed changes to Rule 2-5, the changes to the notification procedures, and increasing constraints on staff due to implementation of multiple new programs over the recent past, staff proposes increasing the amount of time by which the APCO must notify the permit applicant of an approval, approval with conditions, or denial of the application. This change would apply to all permit applications.

2.5.3 DEFINITIONS

The proposed rule amendments would add a definition for Overburdened Community, using CalEnviroScreen version 4.0 scoring percentiles and includes a 1,000-foot buffer zone around any census tract identified by CalEnviroScreen criteria to ensure that projects that may have an influence on Overburdened Communities would also be included. The permit applications for projects that would be located within the high-scoring census tracts or in the 1,000-foot buffer from the census tract boundary would be required to comply with the more stringent cancer risk requirement in proposed Section 2-5-302.

2.5.4 ADMINISTRATIVE REQUIREMENTS

There are several proposed changes to the administrative requirements in Rule 2-1. The proposed changes expand the public notice requirement to require notification of nearby addresses if a project will require a health risk assessment because of toxic air contaminant (TAC) emissions and the project will be located within an Overburdened Community. The proposed changes would also extend the Air District's permit application action times. The completeness review period will be increased from 15 working days (21 calendar days) to 30 days. The final action period (from date of completeness to the date of the Air Pollution Control Officer's decision) currently 35 working days (49 calendar days) for all permit applications, except those subject to California Environmental Quality Act (CEQA) review, major facility review, or public notice requirements. Staff is proposing to replace this time period with two possible final action periods: 90 days, which will apply to most applications, and 180 days for more complex applications, unless the application is subject to CEQA review. Applications subject to CEQA review will continue to require approval of CEQA certification documents before the Air District may make a decision on the application. Staff is also proposing to increase the time period allowed for responding to public comments on applications from 30 days to 60 days.

2.5.5 OTHER RULE SECTIONS

The proposed rule amendments do not include any changes to the Standards, Administrative Requirements, or Manual of Procedures sections of Rule 2-1.

2.6 PROPOSED RULE AMENDMENTS TO RULE 2-5: TOXIC NEW SOURCE REVIEW

The purpose of Rule 2-5: Toxic New Source Review is to provide for the review of new and modified source of toxic air contaminant emissions to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Rule 2-5 currently operates on a regional scale; its requirements are the same throughout the Bay Area, regardless of background air quality (carcinogenic or noncarcinogenic forms of air pollution).

The proposed amendments would transform Rule 2-5 into a rule that regulates on a more local scale. Instead of having one standard that applies throughout the Bay Area, Rule 2-5 would have two standards for cancer risk limits: one that applies in areas that do not score highly according to CalEnviroScreen, and another, more stringent standard, for areas that score highly on CalEnviroScreen and are, therefore, determined to be "Overburdened Communities" for health risk management.

2.6.1 PURPOSE

The amendments are intended to reduce exposure to carcinogenic toxic air contaminant emissions by increasing the level of stringency for new or modified equipment subject to air toxics new source review. The proposed amendments also include updates to the Air District's Health Risk Assessment Guidelines, which describe the procedures for assessing health risk from sources that emit air toxics. Finally, the proposed amendments include updates to the list of toxic air contaminants that the Air District utilizes to determine whether a health risk assessment is necessary.

2.6.2 APPLICABILITY

The proposed amendments to Rule 2-5 would apply to sources that are subject to the Air Toxics New Source Review requirements, although not every change will apply to every project. While some projects located in areas that receive higher scores in CalEnviroScreen will be subject to a more stringent cancer risk standard, some projects will not be subject to a more stringent cancer risk standard than the existing limit of ten in one million. Updates to the Air District's Health Risk Assessment Guidelines that specifically pertain to gasoline dispensing facilities will only apply to those facilities. Updates to the Toxic Air Contaminant Trigger Level table (Table 2-5-1) will apply to sources emitting those chemicals that have been added or updated.

2.6.3 EXEMPTIONS

Section 2-5-113 – Exemption, Small Internal Combustion Engines and Gas Turbines: This section exempts small engines (50 brake horsepower (bhp) capacity or less) from health risk assessment requirements. To clarify rule language, this exemption from a health risk assessment requirement to validate a permit exemption is being moved to Regulation 2-1-114 and Section 2-5-113 will be deleted.

2.6.4 DEFINITIONS

Section 2-5-216 – Project: The proposed amendments modify the definition of Project to include those new or modified sources of toxic air contaminants at a facility that have been permitted within the five-year period immediately preceding the date a complete application is received and any project at a facility where Authority to Construct has been issued and has not expired. This revision is intended to ensure that all potentially related projects are included in the health risk assessment to further prevent circumvention of this rule's requirements.

Section 2-5-227 – Priority Community: Section 2-5-227 is proposed to be deleted, because the definition is no longer necessary. The definition for Overburdened Community is located in Rule 2-1, Section 2-1-243.

Section 2-5-230 – Essential Public Service: The proposed rule amendments include a new definition for essential public service. Essential public services would not be subject to the more stringent cancer risk limit in areas that score highly on CalEnviroScreen; they are instead subject to the existing limit of 10 in one million. In reviewing recent permit applications since the last time Rule 2-5 was amended, it is likely that this limited exemption would not be used often.

2.6.5 STANDARDS

Section 2-5-302 – Project Risk Requirement: The proposed amendments to Rule 2-5 modify the text of the project risk requirement to clarify that there are two project risk requirement standards. These two standards apply in different scenarios: one applies in areas that score high on CalEnviroScreen, and one applies in areas outside of high-scoring CalEnviroScreen locations. Proposed amendments to Section 2-5-302 would clarify that in Overburdened Communities, as defined in proposed Section 2-1-243, the cancer risk limit is six in one million. In areas that are not located within Overburdened Communities, the cancer risk limit would remain unchanged from the current ten in one million limit in the current version of Section 2-5-302.

Section 2-5-303 – Net Project Risk Requirement: Section 2-5-303 was added to Rule 2-5 in 2016 to allow consideration of contemporaneous risk reductions for a small number of projects that involve pre-1987 modified sources. To be subject to Section 2-5-303, projects need to meet the applicability and procedural criteria in Section 2-5-406. To date, no permit applicants have requested to comply with Section 2-5-303.

As with Section 2-5-302 above, the proposed amendments to Rule 2-5 modify the text of the net project risk requirement to clarify that there are two net project risk requirement standards.

2.6.6 ADMINISTRATIVE REQUIREMENTS

Section 2-5-404 – Designation of Priority Community: Section 2-5-404 is proposed to be deleted. The procedures for identifying Overburdened Communities are proposed to be moved to Regulation 2-1-243 because Rule 2-1 will contain the public notification procedures for applications located in Overburdened Communities and is a more general requirement that applies to all permit activities.

Section 2-5-405 – Cumulative Impact Summary for Priority Communities: Section 2-5-405 is proposed to be deleted, because these procedures are no longer necessary. Cumulative impacts summaries in Overburdened Communities are being addressed through other programs such as the Community Health Protection Program.

2.6.7 MANUAL OF PROCEDURES

Section 2-5-602 – Baseline Emission Calculation Procedures: The proposed changes to Section 602.2.2 clarify the procedures for calculating baseline throughput when a source's throughput rate is limited by a bottleneck at a related source. These proposed changes are intended to ensure consistency with the Section 2-5-214.3 definition of a modified source of toxic air contaminants for a source that does not have conditions limiting daily or annual toxic emissions.

Section 2-5-603 – Health Risk Assessment Procedures: There are no proposed changes to the text of Section 2-5-603: Health Risk Assessment Procedures, however, staff is

recommending updates to the Air District's Health Risk Assessment Guidelines, which are included in Appendix C of the Guidelines. Updates to the Air District's Health Risk Assessment Guidelines would revise the health risk assessment procedure for gas stations so that it is consistent with the health risk assessment procedures for all other source types subject to air toxics New Source Review.

Section 2-5-604 – Calculation Procedures for Toxicity Weighted Emissions: There are no proposed changes to the text of Section 2-5-604: Calculation Procedures for Toxicity Weighted Emissions, however, updates to Table 2-5-1 are proposed.

Table 2-5-1 Toxic Air Contaminant Trigger Levels: This table will be updated by adding any new toxic air contaminants and any new health effects values that have been identified by OEHHA since this table was last revised. New toxic air contaminants include carbonyl sulfide, cobalt, 1,6-hexamethylene diisocyanate, and tertiary butyl acetate. Chronic inhalation reference exposure levels (RELs) or the associated chronic trigger level will be updated for: arsine, ethylene glycol butyl ether, mercuric chloride, methylene diphenyl isocyanate, selenium sulfide, toluene, and toluene diisocyanates.

In addition, staff is proposing to revise the procedures by which acute trigger levels are determined. Currently, the acute trigger level is determined based on an acute hazard index of 1.0. The proposed acute trigger levels will instead be based on an acute hazard index of 0.2, which is consistent with the significant source thresholds in Air District Rule 11-18. This change will impact all compounds in Table 2-5-1 that have an acute reference exposure level.

No changes are proposed to the monitoring and records section of Rule 2-5.

2.7 POTENTIAL ENVIRONMENTAL IMPACTS OF AIR TOXIC NSR PROGRAM CHANGES

The proposed changes to Rules 2-1 and 2-5 will increase the stringency of the Air District's Air Toxics New Source Review Program and will increase transparency regarding the permitting process. The following discusses how the proposed changes might impact applications in the future. The sections below discuss staff's analysis using permitting information from the recent past.

The Air District is proposing to reduce the cancer risk limit to six in one million in high-scoring CalEnviroScreen census tracts and surrounding buffer areas. Based on a review of projects that prepared health risk assessments between 2017 and 2021, the Air District determined that about one-third of the health risk assessments prepared over this time period exceed the cancer risk limit of six in one million. While this lookback analysis is not a prediction of the exact types of projects that will be affected in the future, the analysis provides information on how past projects might have been affected by the proposed amendments. The lookback analysis examined projects in Bay Area census tracts that scored at or above the 70th percentile in Draft CalEnviroScreen 4.0. Final CalEnviroScreen 4.0 was subsequently released by OEHHA in October 2021. Air District

staff reviewed the updates and changes included in the Final CalEnviroScreen 4.0 version, and determined that these updates do not result in substantial changes to the lookback analysis, nor do they result in additional affected projects or project types. There were about 40 total applications with a cancer risk between six in one million and ten in one million during this period which translates to about 10 projects per year that may need to modify operations, install additional abatement equipment, or consider other compliance options to comply with the more stringent risk limit in the high-scoring CalEnviroScreen 4.0 Communities (see Table 2-2).

TABLE 2-2

Health Risk Assessment for Projects with Cancer Risk of 6-10 in One Million in High-Scoring CalEnviroScreen 4.0 Communities[1]

Project Type	Number of Applications	Approximate Percent of Total (%)
Metal Casting Facility	1	<3
Conveyors/Stockpiles at Waste Facility	1	<3
Crematory Project	2	5
Prime Diesel Engines	2	5
Standby Diesel Engines	19	49
Gas Station	11	28
Soil Vapor Extraction	2	5
Concrete Manufacturing	1	<3
TOTAL:	39	

(1) February 2017- February 2021

There may also be other types of facilities that would be subject to the more stringent cancer risk limit in areas that have high scores in CalEnviroScreen; however, no other facilities have been permitted in the recent past in these areas. Therefore, the details on the other types of facilities that may be affected by the modifications to the rules are currently speculative.

More details on the types of control measures or changes that may be implemented as a result of revisions to Rules 2-1 and 2-5 are further discussed below.

2.7.1 DIESEL ENGINES

Diesel engines make up the largest share of applications that have cancer risk. Diesel engines are used for many purposes, including providing prime and backup power for facilities such as data centers, fire stations, hospitals, hotels, residential housing operations, and airport operations, to name just a few.

Historical information on health risk assessments prepared for emergency engine projects showed that of the 19 applications in Overburdened Communities with a cancer risk exceeding 6 in one million between February 2017 and February 2021, the average

cancer risk value was 7.9 in one million, with a median value of 7.6 in one million. 19 projects over four years means that about 5 projects per year would have needed to be revised to meet the more stringent cancer risk limit in Overburdened Communities had the proposed risk limit been in place at that time.

Cancer risk from diesel engine operations can be reduced by limiting throughput or operating hours or installing diesel particulate filters to catch particles before they enter the ambient air. Exposure can be lessened by increasing stack height as well.

Further, based on the Air District Best Available Control Technology (BACT) and TBACT Guidelines for emergency backup engines, diesel engines greater than or equal to one thousand brake horsepower (bhp) are required to meet U.S. Environmental Protection Agency (EPA) Tier 4 emissions standards, which is the EPA's most stringent emission standard. There are several ways to comply with the Tier 4 emission standard, including purchase of an EPA-certified Tier 4 engine, purchase of a Tier 4-compliant engine that is packaged by the engine manufacturer with abatement equipment, or retrofit of a Tier 2 engine with aftermarket abatement equipment from a third-party vendor.

2.7.2 GAS STATIONS

Incorporation of the 2015 OEHHA health risk calculation procedures for gas stations as recommended in the proposed rule changes would show that cancer risk increases by about 40 percent for projects where the maximally exposed individual is a residential receptor and will add a new limit on acute impacts. In addition, gas stations that are located in areas that score highly on CalEnviroScreen will also need to comply with more stringent cancer risk limits. Gas station permit applications made up about 30 percent of overall applications in high scoring areas, or about three projects per year in these areas. Outside of these areas, an additional 6 gas station projects per year would have exceeded the 10 in one million risk limit on a regional basis.

Controls available to address toxic air contaminant emissions from gas stations include limiting the throughput rate or operating time, or in the case of new proposed gas stations, possibly revising source locations so that emissions sources are located farther from where people are likely to be exposed.

2.7.3 DIESEL PARTICULATE FILTERS (DPF)

DPFs allow exhaust gases to pass through the filter medium, but trap diesel PM. Depending on engine baseline emissions, fuel sulfur content, and emission test method or duty cycle, DPF's can achieve a PM emission reduction of greater than 85 percent. In addition, DPFs can reduce hydrocarbon emissions by 95 percent and CO emissions by 90 percent. Limited test data indicate that DPFs can also reduce NOx emissions by six to ten percent. Most DPFs require periodic regeneration, most commonly achieved by burning off accumulated diesel PM. There are both active DPFs and passive DPFs. Active DPFs use heat generated by means other than exhaust gases (e.g., electricity, fuel burners, microwaves, and additional fuel injection to increase exhaust gas temperatures)

to assist in the regeneration process. Passive DPFs, which do not require an external heat source to regenerate, incorporate a catalytic material, typically a platinum group metal, to assist in oxidizing trapped diesel PM. Although there is a slight increase in directly emitted NO_2 during the regeneration of passive DPFs, overall there is ultimately a net reduction in NO_2 emissions.

2.7.4 REDUCED THROUGHPUT OR OPERATING TIME

Reducing the amount of materials used in a given process is a straightforward way to reduce emissions. Likewise, reducing the overall time the process operates over a given period will lead to similar emission reductions. The Air District believes that gas stations are likely to comply with the revised rules by limiting the throughput rate or operating time. In the case of proposed new gas stations, the applicant may also revise the source locations so that emission sources are located farther from where people are likely to be exposed. No new air pollution control equipment would be used to meet emission reductions via these methods, thus adverse environmental impacts would not be expected.

2.7.5 RELOCATING A SOURCE OR STACK

Relocating a source or stack farther away from the highest impacted receptor is a common way to reduce health risk. The Air District evaluates health risks at the new source/stack location to ensure that risks to all receptors meet acceptable levels. This type of risk reduction measure would not involve any new equipment or processes and would have no adverse environmental impacts.

2.7.6 STACK MODIFICATIONS

Stack modifications are another common and generally inexpensive risk reduction measure that are often used to reduce risk from back-up generators and soil remediation operations. Changing the direction of a stack (from horizontal to vertical, for example) and increasing the height of a stack to just above the height of nearby buildings will increase the dispersion of the emissions from that stack and will typically result in lower ground level air concentrations at nearby receptors and lower health risks. The Air District evaluates health risks from a project using the modified stack parameters to ensure that risks to all receptors meet acceptable levels. Stack modifications usually involve extensions of about 2-20 feet and are not expected to have any significant impact on the aesthetics of a facility. No other adverse environmental impacts are expected for stack modifications.

2.7.7 ALTERNATIVE TECHNOLOGIES

When health impacts of a proposed project are significant, some applicants may decide to use alternative technologies. One common example of an alternative technology is the use of electrically powered equipment instead of diesel-fired IC engines. These engines are usually installed to provide power during electrical outages. This type of alternative

technology would obviously increase electricity usage at the site, but this impact is not expected to be significant given the current power infrastructure in the Bay Area.

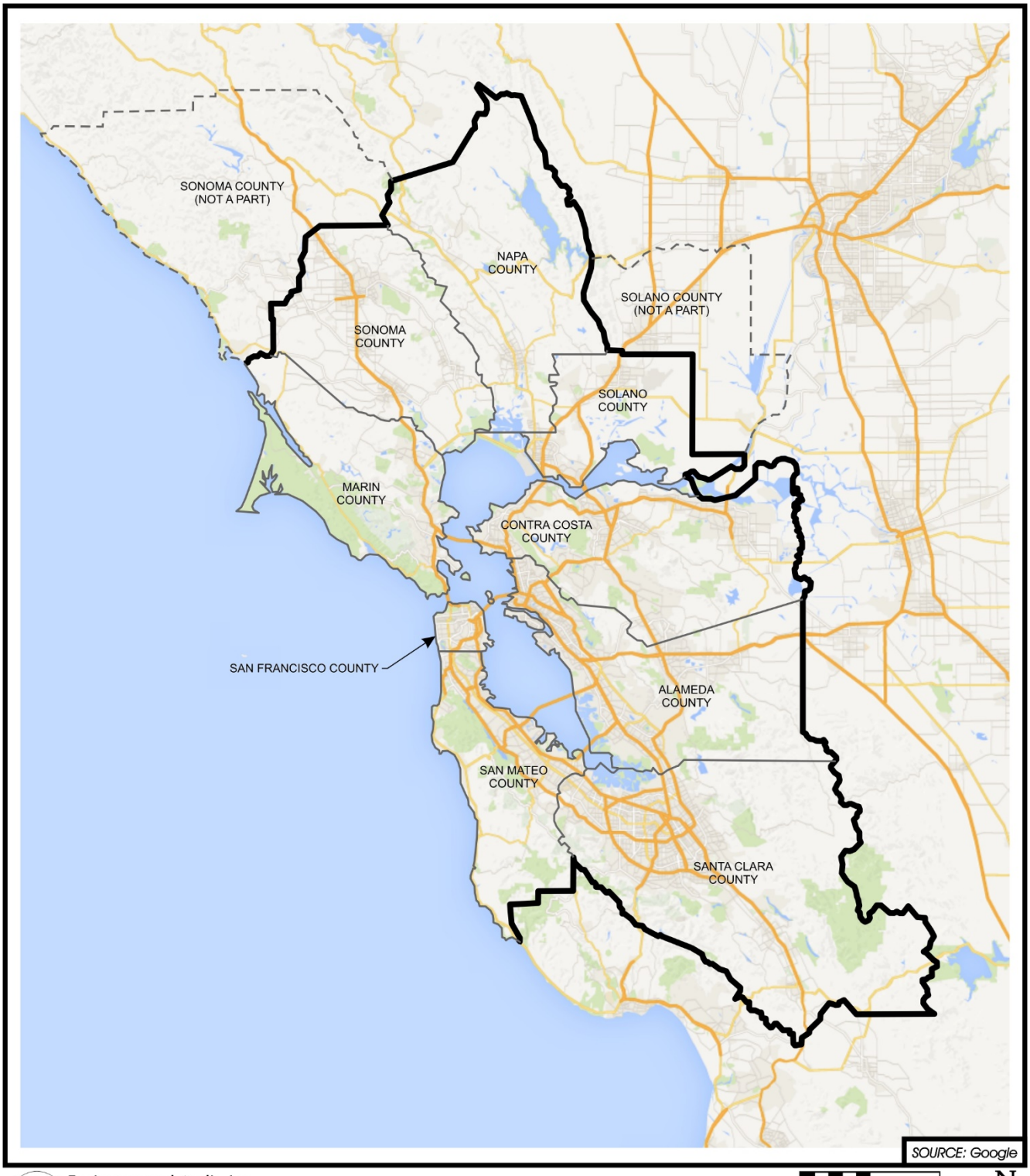
2.7.8 CONCLUSIONS

Based on the above, revisions to Rules 2-1 and 2-5 are expected to:

- Affect an additional five diesel engine applications per year that would require health risk assessments that may require emission reduction measures such as limiting the operating time; increasing the stack height; requiring the use of Tier 4 engines; or requiring the use of diesel particulate filters (DPFs).
- Affect an additional 9 gas station applications per year that would require health risk assessment and potential emission reduction measures such as limiting the throughput/operating hours of the station; requiring the relocation of sources at the site; or requiring stack modifications.

2.8 AFFECTED AREA

While the proposed amendments to Regulations 2-1 and 2-5 are being implemented to reduce toxic air contaminant emissions, they are also expected to reduce criteria pollutant emissions (e.g., particulate matter) within the Air District's jurisdiction. The equipment affected by the proposed project is located within the jurisdiction of the Bay Area Air Quality Management District (see Figure 2-1). The BAAQMD jurisdiction includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma counties (approximately 5,600 square miles). While the rule modifications would affect the entire jurisdiction of the Air District, the goal is to reduce emissions and exposures in overburdened communities, based on CalEnviroScreen 4.0 scoring. The San Francisco Bay Area is characterized by a large, shallow basin surrounded by coastal mountain ranges tapering into sheltered inland valleys. The combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast. The Basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of coastal mountain ranges, inland valleys, and bays.



Project No. 3230 Figure 2-1

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CHAPTER 3

EVALUATION OF ENVIRONMENTAL IMPACTS

Introduction

General Information Form

Summary Checklist:
Environmental Factors Potentially Affected

Determination

Detailed Checklist and Discussion:
Evaluation of Environmental Impacts

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CHAPTER 3

Evaluation of Environmental Impacts

INTRODUCTION

The Initial Study is required to identify and evaluate the proposed project's environmental effects. The California Natural Resources Agency has published a standard checklist for lead agencies to use in doing so, in Appendix G of the CEQA Guidelines. The Appendix G environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. The Guidelines specifically authorize and encourage the use of Appendix G to satisfy the legal requirements for sufficiency of the Initial Study. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Negative Declaration for Proposed Amendments to Regulation 2, Rule 1: General Requirements and Regulation 2, Rule 5: New Source Review of Toxic Air Contaminants
Lead Agency Name:	Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, California 94105
Contact Person:	Mark Tang
Contact Phone Number:	415-749-4778
Project Location:	Rule 2-1 is being amended to require additional public notification and increase the public comment period prior to issuance of certain permits. Rule 2-5 is being amended to be more stringent in overburdened communities and to update health risk assumptions used to calculate toxic air contaminant impacts. The proposed project would apply to the area within the jurisdiction of the Bay Area Air Quality Management District, which encompasses all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano County and southern Sonoma County.
Project Sponsor's Name:	Bay Area Air Quality Management District
Project Sponsor's Address:	375 Beale Street, Suite 600 San Francisco, California 94105
General Plan Designation:	Amendments to Rules 2-1 and 2-5 would apply to the area within the jurisdiction of the Bay Area Air Quality Management and may encompass all general plan designations within the Bay Area.
Zoning:	Amendments to Rules 2-1 and 2.5 would apply to the area within the jurisdiction of the Bay Area Air Quality Management and may encompass all types of zoning within the Bay Area.

Description of Project:	See Chapter 2.
Surrounding Land Uses and Setting:	See “Affected Area” in Chapter 2.
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?	No tribes have requested consultation.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

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

DETERMINATION

On the basis of this initial evaluation:

☑ I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.

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

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

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

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

Signature: Date:

Name:

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis.

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

a) Earlier Analysis Used. Identify and state where they are available for review.

b) Impacts Adequately Addressed. Identify which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

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

Environmental Setting

The Bay Area Air Quality Management District (BAAQMD or Air District) covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano County and southern Sonoma County. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Important views of natural features include the San Francisco Bay and ocean, Mount Tamalpais, Mount Diablo, and other peaks and inland valleys of the Coast Range. Cityscape views offered by buildings and distinctive Bay Area bridges, especially the Golden Gate and Bay Bridges and the San Francisco skyline, are also important built visual resources to the region (ABAG, 2017). Views along travel corridors, including roads and rail lines, are in abundance in the Bay Area and include views of the San Francisco Bay, city scape, mountains and hills, redwood groves, and broader views of the ocean and lowlands, such as along

ridgelines. Because of the variety of visual resources, scenic highways or corridors are located throughout the Bay Area and include 15 routes that have been designated as scenic highways and 29 routes eligible for designation as scenic highways (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 are expected to mainly affect stationary emissions sources which tend to be located in commercial or industrial areas, which are not typically scenic areas.

Regulatory Background

Visual resources are generally protected by the city and/or county general plans through land use and zoning requirements.

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The proposed project would have a substantial adverse effect on a scenic vista.
- The proposed project would substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historical buildings within a state scenic highway.
- The proposed project would substantially degrade the existing visual character or quality of the site and its surroundings.
- The proposed project would add a visual element of urban character to an existing rural or open space area or add a modern element to a historic area.
- The proposed project would create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

Discussion of Impacts

I a-c. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require new or modified sources to install air pollution control equipment (e.g., diesel particulate filters), uses cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. Although it is not expected to be as common, the proposed rule amendments could also affect new or modified heavy industrial sources (e.g., manufacturing facilities, metal casting facilities, waste transfer facilities, concrete manufacturing facilities, etc.) which could require other types of emission control including baghouses and water spray/mist systems. Any new equipment is expected to be compatible with the existing industrial/commercial character of the area.

Implementation of the proposed rule amendments may result in the installation of additional equipment such as diesel particulate filters or changes to operations (hours or operations or throughputs). These types of modifications are not expected to result in visual changes to any

facilities. Equipment such as diesel particulate filters are not visible outside of the facility boundaries. Other methods to reduce emissions would not result in visual changes, e.g., use of different type of engine, or reduction in operating times or throughputs. Any relocation of stationary sources or stacks would be expected to be located further away from sensitive sources and most likely less visible from public areas. The proposed rule amendments are not expected to result in changes to the aesthetic or visual qualities of the stationary sources. It is assumed that modifications at larger industrial facilities could occur (approximately once per year), but these facilities are typically located in heavy industrial areas that are not in scenic areas

The stationary sources affected by the proposed rule amendments are expected to be primarily located in industrial or commercial areas. Scenic highways or corridors are generally not located in industrial or commercial areas. Any new development potentially affecting visual resources would not be a result of the proposed rule amendments and approval of those projects, including their environmental impacts, would occur regardless of the proposed amendments to Rules 2-1 and 2-5. Therefore, the proposed rule amendments are not expected to impact scenic resources or vistas or degrade the existing visual character of any site or its surroundings.

I d. The proposed rule amendments are not expected to require additional lighting to most impacted sources. Implementation of the proposed rule amendments is mainly expected to result in the installation of additional equipment such as diesel particulate filters or changes to operations (hours or operations or throughputs). These types of modifications are not expected to require any additional outdoor lighting. Air pollution control equipment (e.g., baghouses) at larger industrial facilities could result in the need for additional lighting. These types of projects are expected to be limited to industrial areas which already have lighting for nighttime operations. Therefore, the proposed amendments to Rules 2-1 and 2-5 are not expected to generate any substantial light or glare impacts on day or nighttime views.

Conclusion

Based upon these considerations, no significant adverse aesthetic or light and glare impacts are expected due to implementation of the proposed amendments to Rule 2-1 and 2-5.

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

conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Environmental Setting

The Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Some of these agricultural lands are under Williamson Act contracts. Agricultural land under Williamson Act contract includes both prime and nonprime lands. Prime agricultural land includes land with certain specific soil characteristics, land that has returned a predetermined annual gross value for three of the past five years, livestock-supporting land with specific carrying capacities, or land planted with fruit or nut trees, vines, bushes or crops that have a non-bearing period of less than five years (Government Code §51200-51207). Nonprime lands include pasture and grazing lands and other non-irrigated agricultural lands with lesser soil quality.

The Bay Area has a significant amount of land in agricultural uses. In 2010, over half of the region's approximately 4.5 million acres were classified as agricultural lands, as defined by the California Department of Conservation Farmland Mapping and Monitoring Program. Of these, 2.3 million acres of agricultural land, over 70 percent (about 1.7 million acres) are used for grazing. Products grown in the Bay Area include field crops, fruit and nut crops, seed crops, vegetable crops, and nursery products. Field crops, which include corn, wheat, and oats, as well as pasture lands, represent approximately 62 percent of the Bay Area's agricultural land (ABAG, 2017). In 2014, about 1.25 million acres of land were under Williamson Act contract in the Bay Area. Of this, about 203,200 acres were prime farmland and one million acres were nonprime. Lands under Williamson Act contract are primarily used for pasture and grazing and not for cultivation of crops. Approximately 70 percent of prime farmlands under contract are in Santa Clara, Solano, and Sonoma counties (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 are expected to mainly affect stationary sources of emissions which tend to be located in commercial or industrial areas.

Regulatory Background

Agricultural and forest resources are generally protected by the city and/or county general plans, community plans through land use and zoning requirements, as well as any applicable specific plans, ordinances, local coastal plans, and redevelopment plans.

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Discussion of Impacts

II a-e. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, relocate sources or stacks, or install baghouses on larger manufacturing facilities.

The proposed project would not conflict with existing agriculture related zoning designations or Williamson Act contracts. Any new development/new facilities potentially affecting agricultural or forestland resources would not be as a result of the proposed rule and approval of those projects, including their potential environmental impacts, would occur regardless of the proposed rule amendments.

Existing agriculture and forestland resources within the boundaries of the Air District are not expected to be affected by the installation of air pollution control equipment (e.g., diesel particulate filters), the use of cleaner equipment (e.g., Tier 4 engines), a reduction in operating times, or relocation or sources or stacks, that may be required under the proposed rule amendments. Any type of modifications would be expected to occur close to the emissions sources, which are generally located in industrial/commercial areas which lack agricultural and forest resources. Therefore, no significant impacts are expected from the conversion of farmland to non-agricultural use, conflicts with agricultural uses, conversion of land under a Williamson Act contract, or impacts to forestland resources.

Conclusion

Based upon these considerations, no significant adverse impacts to agricultural and forest resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The San Francisco Bay Area is characterized by a large, shallow basin surrounded by mountain ranges tapering into sheltered inland valleys. The basin is bounded by the Pacific Ocean to the west and includes complex terrain consisting of mountains, valleys and bays. Combined climatic and topographic factors result in increased potential for the accumulation of air pollutants in the inland valleys and reduced potential for buildup of air pollutants along the coast.

Air quality conditions in the San Francisco Bay Area have improved since the Air District was created in 1955. The long-term trend of ambient concentrations of air pollutants and the number of days on which the region exceeds ambient air quality standards (AAQS) have generally declined, although some year-to-year variability primarily due to meteorology, causes some short-term increases in the number of exceedance days. The increase of severity and frequency of wildfire smoke episodes since 2017 has led to an increase in levels of annual particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and particulate matter less than 10 microns in diameter (PM_{10}) and indicates the need for continued reductions. The San Francisco Bay Area is in attainment of the State AAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2). However, the Bay Area is not in attainment of the State 24-hour PM_{10} standard, annual PM_{10} standard, and annual $PM_{2.5}$ standard. The Air District is designated

unclassifiable/attainment for the Federal CO, NO_2, SO_2, lead, PM_{10} and 2013 annual $PM_{2.5}$ standards. A designation of unclassifiable/attainment means that the U.S. EPA has sufficient evidence to find the area either is attaining or likely attaining the NAAQS.

Based on the 2020 air quality data from the Air District monitoring stations, no monitoring stations measured an exceedance of any of State or Federal AAQS for CO or NO_2. There was one exceedance of the Federal 1-hour SO_2 standard in 2020 at the Crockett station, and one exceedance of the Federal PM_{10} standard in 2020 at the Concord station. The State 24-hour PM_{10} standard was exceeded at one or more Bay Area stations on eleven days in 2020.

The Bay Area is designated as a non-attainment area for the Federal and State eight-hour ozone standard and the Federal 2006 24-hour $PM_{2.5}$ standard. The State and Federal eight-hour ozone standards were exceeded at one site or more in the Air District on ten and nine days in 2020, respectively; most frequently in the Eastern District, the Santa Clara Valley, and the South Central Bay zones. The Federal 24-hour $PM_{2.5}$ standard was exceeded at one or more Bay Area stations on 25 days in 2020 throughout the Air District.

Criteria Pollutant Health Effects

Ozone: Ozone is not emitted directly from pollution sources. Instead, ozone is formed in the atmosphere through complex chemical reactions between hydrocarbons, or reactive organic gases (ROG), also commonly referred to as volatile organic compounds (VOC) , and nitrogen oxides (NOx), in the presence of sunlight. ROG and NOx are referred to as ozone precursors.

Ozone is harmful to public health at high concentrations near ground level. Ozone can damage the tissues of the lungs and respiratory tract. High concentrations of ozone irritate the nose, throat, and respiratory system and constrict the airways. Ozone also can aggravate other respiratory conditions such as asthma, bronchitis, and emphysema, causing increased hospital admissions. Repeated exposure to high ozone levels can make people more susceptible to respiratory infection and lung inflammation and permanently damage lung tissue. Ozone can also have negative cardiovascular impacts, including chronic hardening of the arteries and acute triggering of heart attacks. Children are most at risk as they tend to be active and outdoors in the summer when ozone levels are highest. Seniors and people with respiratory illnesses are also especially sensitive to ozone's effects. Even healthy adults can be affected by working or exercising outdoors during high ozone levels.

The propensity of ozone for reacting with organic materials causes it to be damaging to living cells, and ambient ozone concentrations in the Bay Area are occasionally sufficient to cause health effects. Ozone enters the human body primarily through the respiratory tract and causes respiratory irritation and discomfort, makes breathing more difficult during exercise, reducing the respiratory system's ability to remove inhaled particles and fight infection while long-term exposure damages lung tissue. People with respiratory diseases, children, the elderly, and people who exercise heavily are more susceptible to the effects of ozone.

Plants are sensitive to ozone at concentrations well below the health-based standards and ozone is responsible for significant crop damage. Ozone is also responsible for damage to forests and other ecosystems.

Reactive Organic Gases (ROGs): It should be noted that there are no state or national ambient air quality standards for ROGs because they are not classified as criteria pollutants. ROGs are regulated, however, because ROG emissions contribute to the formation of ozone. They are also transformed into organic aerosols in the atmosphere, contributing to higher PM_{10} and lower visibility levels.

Although health-based standards have not been established for ROGs, health effects can occur from exposures to high concentrations of ROGs because of interference with oxygen uptake. In general, ambient ROG concentrations in the atmosphere are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis, even at low concentrations. Some hydrocarbon components classified as ROG emissions are thought or known to be hazardous. Benzene, for example, one hydrocarbon component of ROG emissions, is known to be a human carcinogen.

ROG emissions result primarily from incomplete fuel combustion and the evaporation of paints, solvents and fuels. Mobile sources are the largest contributors to ROG emissions. Stationary sources include processes that use solvents (such as manufacturing, degreasing, and coating operations) and petroleum refining, and marketing. Area-wide ROG sources include consumer products, pesticides, aerosol and architectural coatings, asphalt paving and roofing, and other evaporative emissions.

Carbon Monoxide (CO): CO is a colorless, odorless, relatively inert gas. It is a trace constituent in the unpolluted troposphere, and is produced by both natural processes and human activities. In remote areas far from human habitation, carbon monoxide occurs in the atmosphere at an average background concentration of 0.04 ppm, primarily as a result of natural processes such as forest fires and the oxidation of methane. Global atmospheric mixing of CO from urban and industrial sources creates higher background concentrations (up to 0.20 ppm) near urban areas. The major source of CO in urban areas is incomplete combustion of carbon-containing fuels, mainly gasoline used in mobile sources. Consequently, CO concentrations are generally highest in the vicinity of major concentrations of vehicular traffic.

CO is a primary pollutant, meaning that it is directly emitted into the air, not formed in the atmosphere by chemical reaction of precursors, as is the case with ozone and other secondary pollutants. Ambient concentrations of CO in the District exhibit large spatial and temporal variations, due to variations in the rate at which CO is emitted, and in the meteorological conditions that govern transport and dilution. Unlike ozone, CO tends to reach high concentrations in the fall and winter months. The highest concentrations frequently occur on weekdays at times consistent with rush hour traffic and late night during the coolest, most stable atmospheric portion of the day.

When CO is inhaled in sufficient concentrations, it can displace oxygen and bind with the hemoglobin in the blood, reducing the capacity of the blood to carry oxygen. Individuals most at risk from the effects of CO include heart patients, fetuses (unborn babies), smokers, and people

who exercise heavily. Normal healthy individuals are affected at higher concentrations, which may cause impairment of manual dexterity, vision, learning ability, and performance of work. The results of studies concerning the combined effects of CO and other pollutants in animals have shown a synergistic effect after exposure to CO and ozone.

Particulate Matter (PM_{10} & $PM_{2.5}$): Particulate matter, or PM, consists of microscopically small solid particles or liquid droplets suspended in the air. PM can be emitted directly into the air or it can be formed from secondary reactions involving gaseous pollutants that combine in the atmosphere. Particulate pollution is primarily a problem in winter, accumulating when cold, stagnant weather comes into the Bay Area. PM is usually broken down further into two size distributions, PM_{10} and $PM_{2.5}$. Of great concern to public health are the particles small enough to be inhaled into the deepest parts of the lungs. Respirable particles (particulate matter less than about 10 micrometers in diameter) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM_{10} and $PM_{2.5}$.

A consistent correlation between elevated ambient particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. Studies have reported an association between long-term exposure to air pollution dominated by fine particles ($PM_{2.5}$) and increased mortality, reduction in lifespan, and an increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions, to school and kindergarten absences, to a decrease in respiratory function in normal children and to increased medication use in children and adults with asthma. Studies have also shown lung function growth in children is reduced with long-term exposure to particulate matter. The elderly, people with pre-existing respiratory and/or cardiovascular disease and children appear to be more susceptible to the effects of PM_{10} and $PM_{2.5}$.

Nitrogen Dioxide (NO_2): NO_2 is a reddish-brown gas with a bleach-like odor. Nitric oxide (NO) is a colorless gas, formed from the nitrogen (N_2) and oxygen (O_2) in air under conditions of high temperature and pressure which are generally present during combustion of fuels; NO reacts rapidly with the oxygen in air to form NO_2. NO_2 is responsible for the brownish tinge of polluted air. The two gases, NO and NO_2, are referred to collectively as nitrogen oxides or NOx. In the presence of sunlight, NO_2 reacts to form nitric oxide and an oxygen atom. The oxygen atom can react further to form ozone, via a complex series of chemical reactions involving hydrocarbons. Nitrogen dioxide may also react to form nitric acid (HNO_3) which reacts further to form nitrates, which are a component of PM_{10}.

NO_2 is a respiratory irritant and reduces resistance to respiratory infection. Children and people with respiratory disease are most susceptible to its effects.

Sulfur Dioxide (SO_2): SO_2 is a colorless gas with a sharp odor. It reacts in the air to form sulfuric acid (H_2SO_4), which contributes to acid precipitation, and sulfates, which are a component of PM_{10}

and $PM_{2.5}$. Most of the SO_2 emitted into the atmosphere is produced by the burning of sulfur-containing fuels.

At sufficiently high concentrations, SO_2 affects breathing and the lungs' defenses, and can aggravate respiratory and cardiovascular diseases. Asthmatics and people with chronic lung disease or cardiovascular disease are most sensitive to its effects. SO_2 also causes plant damage, damage to materials, and acidification of lakes and streams.

Non-Criteria Pollutants Health Effects

Although the primary mandate of the Air District is attaining and maintaining the national and state Ambient Air Quality Standards for criteria pollutants within the Air District jurisdiction, the Air District also has a general responsibility to control, and where possible, reduce public exposure to airborne toxic compounds. TACs are a defined set of airborne pollutants that may pose a present or potential hazard to human health. TACs can be emitted directly and can also be formed in the atmosphere through reactions among different pollutants. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis or genetic damage; or short-term acute affects such as eye watering, respiratory irritation, running nose, throat pain, and headaches. TACs are separated into carcinogens and non-carcinogens based on the nature of the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. Non-carcinogenic substances differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is expected to occur. These levels are determined on a pollutant-by-pollutant basis. The air toxics program was established as a separate and complementary program designed to evaluate and reduce adverse health effects resulting from exposure to TACs.

The major elements of the District's air toxics program are outlined below.

- Preconstruction review of new and modified sources for potential health impacts, and the requirement for new/modified sources with TAC emissions that exceed a specified threshold to use BACT.

- The Air Toxics Hot Spots Program, designed to identify industrial and commercial facilities that may result in locally elevated ambient concentrations of TACs, to report significant emissions to the affected public, and to reduce unacceptable health risks.

- Findings from the District's Community Health Protection Program have been implemented to identify areas where air pollution contributes most to health impacts and where populations are most vulnerable to air pollution; to reduce the health impacts in these areas; and to engage the community and other agencies to develop additional actions to reduce local health impacts.

- Control measures designed to reduce emissions from source categories of TACs, including rules originating from the state Toxic Air Contaminant Act and the federal Clean Air Act.

- The TAC emissions inventory, a database that contains information concerning routine and predictable emissions of TACs from permitted stationary sources.

- Ambient monitoring of TAC concentrations at a number of sites throughout the Bay Area.

- The District's Regulation 11, Rule 18: Reduction from Air Toxic Emissions at Existing Facilities, which was adopted November 15, 2017. This rule requires the District to conduct screening analyses for facilities that report TAC emissions within the District and calculate health prioritization scores based on the amount of TAC emissions, the toxicity of the TAC pollutants, and the proximity of the facilities to local communities. The District will conduct health risk assessments for facilities that have priority scores above a certain level. Based on the health risk assessment, facilities found to have a potential health risk above the risk action level would be required to reduce their risk below the action level, or install Best Available Retrofit Control Technology for Toxics on all significant sources of toxic emissions.

TAC Health Effects

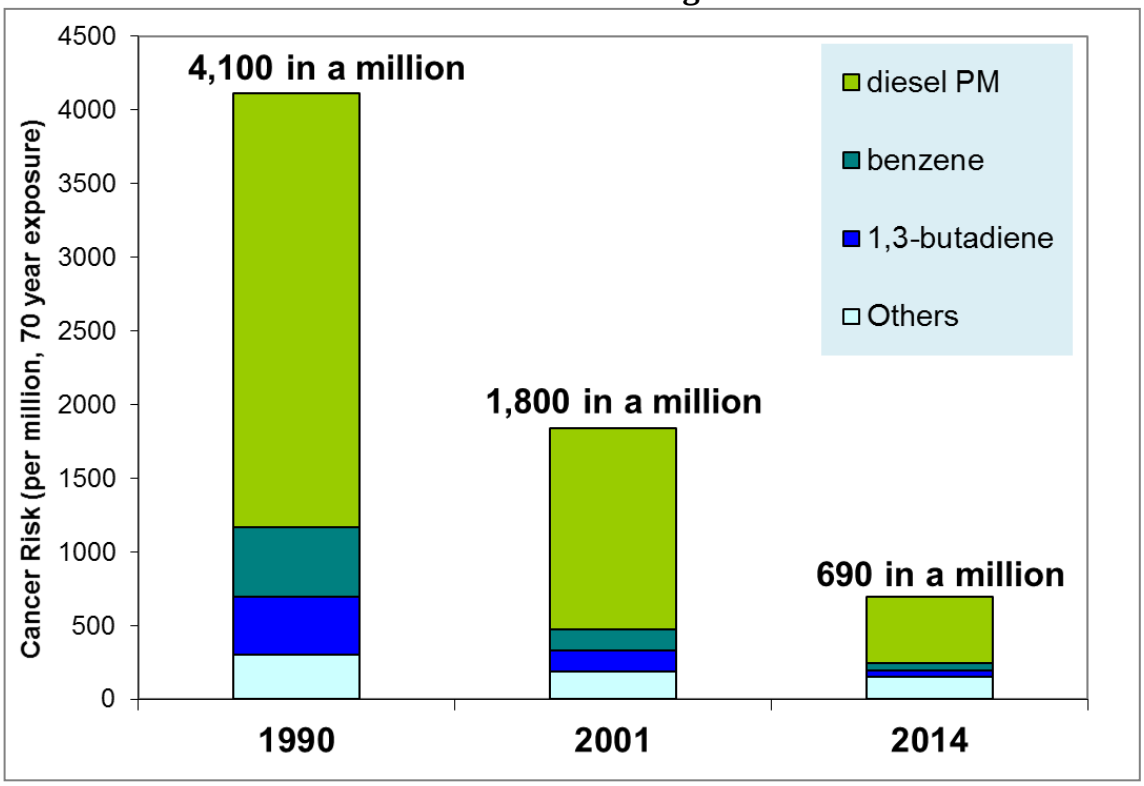
TACs can cause or contribute to a wide range of health effects. Acute (short-term) health effects may include eye and throat irritation. Chronic (long-term) exposure to TACs may cause more severe effects such as neurological damage, hormone disruption, developmental defects, and cancer. CARB has identified roughly 200 TACs, including diesel particulate matter (diesel PM) and environmental tobacco smoke.

Unlike criteria pollutants which are subject to ambient air quality standards, TACs are primarily regulated at the individual emissions source level based on risk assessment. Human outdoor exposure risk associated with an individual air toxic species is calculated as its ground-level concentration multiplied by an established unit risk factor for that air toxic species. Total risk due to TACs is the sum of the individual risks associated with each air toxic species.

Occupational health studies have shown diesel PM to be a lung carcinogen as well as a respiratory irritant. Benzene, present in gasoline vapors and also a byproduct of combustion, has been classified as a human carcinogen and is associated with leukemia. 1,3-butadiene, produced from motor vehicle exhaust and other combustion sources, has also been associated with leukemia. Reducing 1,3-butadiene also has a co-benefit in reducing the TAC acrolein.

Acetaldehyde and formaldehyde are emitted from fuel combustion and other sources. They are also formed photo-chemically in the atmosphere from other compounds. Both compounds have been found to cause nasal cancers in animal studies and are also associated with skin and respiratory irritation. Human studies for carcinogenic effects of acetaldehyde are sparse but, in combination with animal studies, sufficient to support classification as a probable human carcinogen. Formaldehyde has been associated with nasal sinus cancer and nasopharyngeal cancer, and possibly with leukemia.

FIGURE 3-1: Cancer-Risk Weighted Toxics Trends



Source: BAAQMD, 2020a.

The primary health risk of concern due to exposure to TACs is the risk of contracting cancer. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there are not "safe" levels of exposure to carcinogens without some risk to causing cancer. The proportion of cancer deaths attributable to air pollution has not been estimated using epidemiological methods. Based on ambient air quality monitoring, and using OEHHA cancer risk factors,[1] the estimated lifetime cancer risk for Bay Area residents, over a 70-year lifespan from all TACs combined, declined from 4,100 cases per million in 1990 to 690 cases per million people in 2014, as shown in Figure 3-1. This represents an 80 percent decrease between 1990 and 2014 (BAAQMD, 2020a).

The cancer risk related to diesel PM, which accounts for most of the cancer risk from TACs, has declined substantially over the past 15-20 years as a result of ARB regulations and Air District

[1] See CARB's Risk Management Guidance for Stationary Sources of Air Toxics, Discussion Draft, May 27, 2015, https://www.arb.ca.gov/toxics/rma/rma_guidancedraft052715.pdf and the Office Environmental Health Hazard Assessment's toxicity values at http://oehha.ca.gov/media/CPFs042909.pdf. The cancer risk estimates shown in Figure 3-1 are higher than the estimates provided in documents such as the Bay Area 2010 Clean Air Plan and the April 2014 CARE report entitled *Improving Air Quality and Health in Bay Area Communities*. It should be emphasized that the higher risk estimates shown in Figure 3-1 are due solely to changes in the methodology used to estimate cancer risk, and not to any actual increase in TAC emissions or population exposure to TACs.

programs to reduce emissions from diesel engines. However, diesel PM still accounts for roughly 60 percent of the total cancer risk related to TACs.

Air Toxics Emission Inventory

The Air District maintains a database that contains information concerning emissions of TACs from permitted stationary sources in the Bay Area. This inventory, and a similar inventory for mobile and area sources compiled by CARB, is used to plan strategies to reduce public exposure to TACs. The detailed emissions inventory is reported in the Air District Toxic Air Contaminant Control Program, 2017 Annual Report (BAAQMD, 2020b). The 2017 emissions inventory continues to show decreasing emissions of many TACs in the Bay Area.

Table 3-1 contains a summary of average ambient concentrations of TACs measured at monitoring stations in the Bay Area by the District in 2017.

Regulatory Background

Criteria Pollutants

The U.S. EPA is responsible for setting and enforcing the National Ambient Air Quality Standards for ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

TABLE 3-1

Summary of 2017 Air District Ambient Air Toxics Monitoring Data

Compound	Max. Conc. (ppb) (1)	Min. Conc. (ppb) (2)	Mean Conc. (ppb) (3)
1,3-Butadiene	0.541	0.000	0.012
Acetaldehyde	5.680	0.480	1.982
Acetone	29.901	0.345	4.072
Acetonitrile	3.799	0.000	0.088
Acyrlonitrile	0.323	0.000	0.001
Benzene	3.123	0.000	0.221
Carbon Tetrachloride	0.130	0.024	0.098
Chloroform	0.115	0.000	0.023
Dichloromethane	1.791	0.000	0.159
Ethyl Alcohol	91.740	0.236	5.455
Ethylbenzene	1.136	0.000	0.138
Ethylene Dibromide	0.000	0.000	0.000
Ethylene Dichloride	0.000	0.000	0.000
Formaldehyde	7.290	0.480	2.707
Freon-113	0.205	0.051	0.070
Methyl Chloroform	1.226	0.000	0.006
Methyl Ethyl Ketone	5.743	0.000	0.259
Tetrachloroethylene	0.337	0.000	0.003
Toluene	3.925	0.000	0.503
Trichloroethylene	0.328	0.000	0.001
Trichlorofluoromethane	0.593	0.194	0.248
Vinyl Chloride	0.000	0.000	0.000
m/p-Xylene	2.929	0.000	0.236
o-Xylene	1.446	0.000	0.108

Source: BAAQMD, 2018a

NOTES: Table 3-1 summarizes the results of the Air District gaseous toxic air contaminant monitoring network for the year 2017. These data represent monitoring results at 21 separate sites at which samples were collected.

(1) "Maximum Conc." is the highest daily concentration measured at any of the 21 monitoring sites.

(2) "Minimum Conc." is the lowest daily concentration measured at any of the 21 monitoring sites.

(3) "Mean Conc." is the arithmetic average of the air samples collected in 2017 at the 21 monitoring sites.

(4) Acetaldehyde and formaldehyde concentrations reflect measurements from one monitoring site (San Jose-Jackson).

At the federal level, the Clean Air Act Amendments of 1990 give the U.S. Environmental Protection Agency additional authority to require states to reduce emissions of ozone precursors and particulate matter in non-attainment areas. The amendments set attainment deadlines based on the severity of problems. At the state level, CARB has traditionally established state ambient air quality standards, maintained oversight authority in air quality planning, developed programs for reducing emissions from motor vehicles, developed air emission inventories, collected air quality and meteorological data, and approved state implementation plans. At a local level, California's air districts, including the Bay Area Air Quality Management District, are responsible for overseeing stationary source emissions, approving permits, maintaining emission inventories, developing air quality compliance plans, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

Other federal regulations applicable to the Bay Area include Title III of the Clean Air Act, which regulates hazardous air pollutants (HAPs). Title V of the Act establishes a federal permit program for large stationary emission sources. The U.S. EPA also has authority over the Prevention of Significant Deterioration (PSD) program, as well as the New Source Performance Standards (NSPS), both of which regulate stationary sources under specified conditions.

The Air District is responsible for regulating stationary sources of air pollution in the nine counties that surround San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma counties. The District is responsible for implementing emissions standards and other requirements of federal and state laws. Numerous regulations have been developed by the District to control emissions sources within its jurisdiction. It is also responsible for developing air quality planning documents required by both federal and state laws.

Toxic Air Contaminants

TACs are regulated in the District through federal, state, and local programs. At the federal level, HAPs are regulated primarily under the authority of the Clean Air Act. Prior to the amendment of the Clean Air Act in 1990, source-specific National Emission Standards for Hazardous Air Pollutants (NESHAPs) were promulgated under Section 112 of the Clean Air Act for certain sources of radionuclides and Hazardous Air Pollutants.

Title III of the 1990 Clean Air Act amendments required U.S. EPA to promulgate NESHAPs for certain categories of sources identified by U.S. EPA as emitting one or more of the 189 listed HAPs. Emission standards for major sources must require the maximum achievable control technology (MACT). MACT is defined as the maximum degree of emission reduction achievable considering cost and non-air quality health and environmental impacts and energy requirements.

Many of the sources of HAPs that have been identified under the Clean Air Act are also subject to the California TAC regulatory programs. CARB developed regulatory programs for the control of TACs, including: (1) California's TAC identification and control program, adopted in 1983 as Assembly Bill 1807 (AB 1807) (California Health and Safety Code §39662), a two-step program in which substances are identified as TACs, and airborne toxic control measures are adopted to

control emissions from specific sources; and (2) the Air Toxics Hot Spot Information and Assessment Act of 1987 (AB 2588) (California Health and Safety Code §39656), which established a state-wide program to inventory and assess the risks from facilities that emit TACs and to notify the public about significant health risks associated with those emissions.

The Air District uses three approaches to reduce TAC emissions and to reduce the health impacts resulting from TAC emissions: 1) Specific rules and regulations; 2) Pre-construction review; and, 3) the Air Toxics Hot Spots Program. In addition, the Air District implements U.S. EPA, CARB, and Air District rules that specifically target toxic air contaminant emissions from sources at petroleum refineries.

In 2004, the Air District initiated the Community Air Risk Evaluation (CARE) program to identify areas with relatively high concentrations of air pollution – including TACs and fine particulate matter – and populations most vulnerable to air pollution's health impacts. Maps of communities most impacted by air pollution, generated through the CARE program, have been integrated into many Air District programs. For example, the Air District uses information derived from the CARE program to develop and implement targeted risk reduction programs, including grant and incentive programs, community outreach efforts, collaboration with other governmental agencies, model ordinances, new regulations for stationary sources and indirect sources, and advocacy for additional legislation. Information from the CARE program has been used to determine the communities most impacted by air quality for the purposes of the Air District's Community Health Protection Program, which implements AB617 in the Bay Area.

Significance Criteria

The Air District's CEQA Guidelines have been developed to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality. The most recent significance thresholds are the District's CEQA Air Quality Guidelines (BAAQMD, 2017a) dated May 2017. These guidelines provide suggested significance thresholds for evaluation of impacts of a proposed project during both construction and operation phases.

Construction Emissions

The Air District's 2017 Thresholds of Significance will be used in the current air quality analysis for construction emissions (see Table 3-2).

TABLE 3-2

Thresholds of Significance for Construction-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lbs/day)
ROG	54
NOx	54
PM_{10}	82*
$PM_{2.5}$	54*
PM_{10}/ $PM_{2.5}$ Fugitive Dust	Best Management Practices

*Applies to construction exhaust emissions only.
Source: BAAQMD, 2017a

Operational Emissions

The 2017 project-level stationary source CEQA thresholds are identified in Table 3-3. These represent the levels at which a project's individual emissions would result in a cumulatively considerable contribution to the Air District's existing air quality conditions for individual projects. These thresholds are based on the federal offset requirements for ozone precursors for which the Bay Area is designated as a non-attainment area, which is an appropriate approach to prevent further deterioration of ambient air quality and thus has nexus and proportionality to prevent regionally cumulative significant impacts (e.g., worsened status of non -attainment). Despite being a non-attainment area for state PM_{10} and non-attainment for federal $PM_{2.5}$, the Federal NSR significant emission rate annual limits of 15 and 10 tons per year, respectively, are the thresholds established by the Air District, as the Air District has not established an offset requirement limit for $PM_{2.5}$ and the existing limit of 100 tons per year is much less stringent and would not be appropriate for the Federal 24-hour $PM_{2.5}$ standards. These operational thresholds represent the emission levels above which a project's individual emissions would result in a cumulatively considerable contribution to the Bay Area's existing air quality conditions (BAAQMD, 2017a). To provide a conservative air quality analysis, the air quality impacts analysis will use the project-specific thresholds (see Table 3-3) recommended in the revised 2017 CEQA Guidelines (BAAQMD, 2017a)

TABLE 3-3

Thresholds of Significance for Operation-Related Criteria Air Pollutants and Precursors

Pollutant/Precursor	Daily Average Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	10
NOx	54	10
PM_{10}	82	15
$PM_{2.5}$	54	10

*Source: BAAQMD, 2017a

For air toxics concerns, the threshold for a significant air quality impact is a lifetime cancer risk of 10 additional cancers per million people exposed or a non-cancer (i.e., chronic or acute) risk greater than 1.0 hazard index (BAAQMD, 2017a).

Discussion of Impacts

III a. Proposed amendments to Rules 2-1 and 2-5 are not expected to conflict with or obstruct implementation of the applicable air quality plan. The applicable air quality plan is the Air District's 2017 Clean Air Plan, *Spare the Air, Cool the Climate* ("Plan"). The Plan outlines a strategy for achieving the Bay Area's clean air goals by reducing emissions of ozone precursors, particulate matter, TACs and other pollutants in the region. One of the objectives of the 2017 Plan was to "eliminate disparities among Bay Area communities in cancer health risk and toxic air contaminants" and to "reduce ambient concentrations of toxic air contaminants." The 2017 Plan included Control Measure SS21 (New Source Review for Toxics) which proposed revisions to Air District Rule 2-5 due to changes in OEHHA's 2015 HRA Guidelines and revisions to the HRA trigger levels. The proposed amendments to Rules 2-1 and 2-5 would implement portions of Control Measure SS21 in the 2017 Plan, complementing the 2016 amendments to Rule 2-5. Therefore, the proposed rule amendments will not conflict with or obstruct implementation of the 2017 Clean Air Plan, rather they will help achieve the Plan's goals by helping to minimize toxic air contaminant emissions.

III b and c. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters, baghouses, water mist systems), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks, which may generate air quality impacts, as discussed below.

Construction Air Quality Impacts

Construction activities may be required for the construction of air pollution control equipment, relocating equipment, or modifying existing equipment. Construction emissions are summarized in Table 3-4 and detailed emission calculations are provided in Appendix A.

Construction would likely require truck trips to deliver equipment, a construction crew of five to twenty workers, and a few pieces of construction equipment (e.g., cranes, forklift, aerial lifts, welders, and hand tools). The construction associated with the modified the rules are divided into two types of construction, small projects and large projects. Modifications to or the relocation of diesel engines and changes to stacks would be considered small projects. Construction of new air pollution control equipment or resizing existing air pollution control equipment for facilities (e.g., new baghouses) are considered large projects. Small projects are expected to take only a single day. Large projects are expected to take one month (20 working days). Construction emissions are based on 14 small projects and 1 large project. All construction is expected to occur in paved

areas, therefore, no emissions from earthmoving activities or fugitive dust from unpaved roads is expected to be generated.

In order to conservatively estimate peak day emissions, it is estimated that one small project and one large project will occur at a time with all construction equipment operating concurrently (see Appendix A for detailed emissions calculations). As shown in Table 3-4, construction emissions are expected to be less than the CEQA significance thresholds and would not be expected to result in a significant air quality impact. Further, the amendments to Rules 2-1 and 2-5 may reduce or minimize criteria pollutant emissions, however, the emissions benefits are unknown and, thus, are not quantified in this analysis. Even with the omission of emissions reductions, the increases in criteria emissions associated with the construction activities related to the amendments to Rules 2-1 and 2-5 are expected to be less than the significance thresholds and, thus, not expected to make a cumulatively considerable air quality impact.

TABLE 3-4

Estimated Construction Emissions Impacts
(lb/day)

Pollutant	**ROG**	**CO**	**NOx**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Small Project Construction Peak Day Emissions (1)	0.5	3.4	4.8	<0.1	0.6	0.3
Large Project Construction Peak Day Emissions (1)	0.9	6.9	9.0	<0.1	0.9	0.5
Total Peak Day Emissions (1)	1.4	10.3	13.8	<0.1	1.5	1.0
BAAQMD CEQA Thresholds	**54**	**NE(2)**	**54**	**NE(2)**	**82**	**54**
Significant?	**NO**	**--**	**NO**	**--**	**NO**	**NO**

1. Based on CARB Off-Road 2017 emission factors.
2. NE – CEQA Thresholds are not established.
3. See Appendix A for detailed emission calculations.

Operational Air Quality Impacts

The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters, baghouses, water mist systems), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. None of the known technology is expected to increase criteria pollutant emissions. Further, all of the potential compliance strategies would either have no change or reduce criteria pollutant emissions. However, the actual emissions benefits are unknown and, thus, are not quantified in this analysis.

Diesel Engines

Diesel engines make up the largest share of applications that have cancer risk. Diesel engines are used for many purposes, including providing prime and backup power for facilities such as data centers, fire stations, hospitals, hotels, residential housing operations, and airport operations, to name just a few. Cancer risk from diesel engine operations can be reduced by limiting throughput or operating hours, retrofitting existing diesel engines with air pollution control technology, or replacing old diesel engines with Tier 4 equipment.

Gasoline Service Stations

Incorporation of the 2015 OEHHA health risk calculation procedures for gas stations as recommended in the proposed rule changes would show that cancer risk increases by about 40 percent for projects where the maximally exposed individual is a residential receptor and will add a new limit on acute impacts. In addition, gas stations that are located in areas that score highly on CalEnviroScreen will also need to comply with more stringent cancer risk limits.

Controls available to address toxic air contaminant emissions from gas stations include limiting the throughput rate or operating time, or in the case of new proposed gas stations, possibly revising source locations so that emissions sources are located farther from where people are likely to be exposed.

Other Facilities and Technologies

When health impacts of a proposed project are significant, some applicants may decide to use alternative technologies. Some common examples are to upgrade or install baghouses to control particulate matter; upgrade or install water spray system to abate fugitive dust; or alternative technology such as the use of electrically powered equipment instead of diesel-fired engines. Baghouses and electric motors could increase electricity usage at the site, but this impact is not expected to be significant given the current power infrastructure in the Bay Area.

Health Risk Impacts

The amendments to Rules 2-1 and 2-5 are expected to minimize and potentially reduce TAC emissions from the operation of the air pollution control equipment and implementation of other strategies. However, the emissions benefits are unknown and, thus, are not quantified in this analysis. Therefore, amendments to Rules 2-1 and 2-5 are not expected to expose sensitive receptors to any new or substantial TAC pollutant concentrations, but would be expected to result in a reduction in TAC emissions and related health risks.

III d. The amendments to Rules 2-1 and 2-5 are expected to minimize and potentially reduce TAC emissions from the operation of the air pollution control equipment and implementation of other strategies. Further, no emissions are expected during the construction or operational phases that are expected to generate odors. Therefore, no significant odor impacts are expected due to implementation of proposed rule amendments.

Conclusion

Based upon these considerations, no significant adverse impacts to air quality resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5. Rather, the proposed rule amendments are expected to result in a decrease in TAC emissions associated with the operation of the air pollution control equipment and implementation of other emissions control strategies.

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

Environmental Setting

The Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. A wide variety of biological resources are located within the Bay Area.

The Bay Area supports numerous distinct natural communities composed of a diversity of vegetative types that provide habitat for a wide variety of plan and wildlife species. Broad habitat categories in the region include grasslands, coastal scrubs and chaparral, woodlands and forests, riparian systems and freshwater aquatic habitat, and wetlands. Extensive aquatic resources are provided by the San Francisco Bay Delta estuary, as well as numerous other rivers and streams. Urban and otherwise highly disturbed habitats, such as agricultural fields, also provide natural functions and values as wildlife habitat (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 are expected to mainly affect back up diesel engines and gasoline stations which tend to be located in commercial/industrial areas or where native vegetation has been removed, although emergency diesel engines can be located in all types of areas. Biological resources are not usually located in industrial or commercial areas.

Regulatory Background

Biological resources are generally protected by the City and/or County General Plans through land use and zoning requirements which minimize or prohibit development in biologically sensitive areas. Biological resources are also protected by the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service. The U.S Fish and Wildlife Service and National Marine Fisheries Service oversee the Federal Endangered Species Act. Development permits may be required from one or both of these agencies if development would impact rare or endangered species. The California Department of Fish and Wildlife administers the California Endangered Species Act, which prohibits impacting endangered and threatened species. The U.S. Army Corps of Engineers and the U.S. EPA regulate the discharge of dredge or fill material into waters of the United States, including wetlands.

Significance Criteria

The proposed project impacts on biological resources will be considered significant if:

- The project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- The project has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.

- The project has a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- The project interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
- The project conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Discussion of Impacts

IV a, b, c and d). The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters or particulate control), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. Any new equipment is expected to be compatible with the existing industrial/commercial character of the area where the existing sources are located.

Implementation of the proposed rule amendments may result in the installation of additional equipment such as diesel particulate filters or changes to operations (hours or operations or throughputs). These types of modifications are not expected to result in any construction activities outside of the existing facilities, which are largely industrial or commercial facilities. Air pollution control equipment such as baghouses would not require any construction outside of the facility boundaries. Other methods to reduce emissions would not result in any construction activities, e.g., use of different type of engine, or reduction in operating times or throughputs. Any relocation of stationary sources or stacks would be expected to be located within the boundaries of the existing facility, as well. The proposed rule amendments are not expected to result in construction activities outside of the existing facility or result in impacts to biological resources. The stationary sources affected by the proposed rule amendments are expected to be primarily located in industrial or commercial areas, where native vegetation has largely been removed or is non-existent. Any new development potentially affecting biological resources would not be as a result of the proposed rule amendments and approval of those projects, including their environmental impacts, would occur regardless of the proposed amendments to Rules 2-1 and 2-5. Therefore, the proposed rule amendments are not expected to impact biological resources and would not be expected to impact riparian, wetlands, or other sensitive communities.

IV e and f). The proposed amendments to Rules 2-1 and 2-5 are not expected to affect land use plans, local policies or ordinances, or regulations protecting biological resources such as a tree preservation policy or ordinances for the reasons described above. Land use and other planning considerations are determined by local governments and land use or planning requirements would not be altered by the proposed rule amendments. Similarly, the proposed rule amendments are not expected to affect any habitat conservation or natural community conservation plans, biological

resources or operations, and would not create divisions in any existing communities, as construction activities are expected to be limited to existing facilities in industrial/commercial areas that have already been developed and graded.

Conclusion

Based upon these considerations, no significant adverse impacts to biological resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V.	**CULTURAL RESOURCES.** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☑	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☑	☐
c)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☑	☐

Environmental Setting

The Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. Cultural resources are defined as buildings, sites, structures, or objects which might have historical architectural, archaeological, cultural, or scientific importance. Cultural resources also include paleontological sites, which can consist of mineralized, partially mineralized, or unmineralized bones and teeth, soft tissues, shells, wood, leaf impressions, footprints, burrows, and microscopic remains that are more than 5,000 years old and occur mainly in Pleistocene or older sedimentary rock units.

The Carquinez Strait represents the entry point for the Sacramento and San Joaquin Rivers into the San Francisco Bay. This locality lies within the San Francisco Bay and the west end of the Central Valley archaeological regions, both of which contain a rich array of prehistoric and historical cultural resources. The areas surrounding the Carquinez Strait and Suisun Bay have been occupied for millennia given their abundant combination of littoral and oak woodland resources.

Historic resources are standing structures of historic or aesthetic significance. Architectural sites dating from the Spanish Period (1529-1822) through the late 1960s are generally considered for protection if they are determined to be historically or architecturally significant. These may include missions, historic ranch lands, and structures from the Gold Rush and the region's early industrial era. More recent architectural sites may also be considered for protection if they could gain historic significance in the future (ABAG, 2017).

Of the 8,199 sites recorded in the Bay Area, there are 1,006 cultural resources listed on the California Register of Historic Resources (CRHR), meaning that they are significant at the local, State or federal level; of those, 744 are also listed on the National Register of Historic Places (NRHP). From this list, 249 resources are listed as California Historic Landmarks. The greatest concentration of historic resources listed on both the NRHP and the CRHR in the Bay Area occurs in San Francisco, with 181 resources. Alameda County has the second highest number with 147 resources (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 are expected to mainly affect stationary emission sources which tend to be located in commercial/industrial areas or already developed areas. Grading to install control equipment is not expected to be required, so cultural resources are not expected to be impacted.

Regulatory Background

The State CEQA Guidelines define a significant cultural resource as a "resource listed or eligible for listing on the California Register of Historical Resources" (Public Resources Code Section 5024.1). A project would have a significant impact if it would cause a substantial adverse change in the significance of a historical resource (State CEQA Guidelines Section 15064.5(b)). A substantial adverse change in the significance of a historical resource would result from an action that would demolish or adversely alter the physical characteristics of the historical resource that convey its historical significance and that qualify the resource for inclusion in the California Register of Historical Resources or a local register or survey that meets the requirements of Public Resources Code §§50020.1(k) and 5024.1(g).

Significance Criteria

The proposed project impacts to cultural resources will be considered significant if:

- The project results in a substantial adverse change in the significance of historical resources as defined in CEQA Guidelines §15064.5. A substantial adverse change includes physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resources would be materially impaired.
- Cause a substantial adverse change in the significance of an archaeological resources pursuant to CEQA Guidelines §15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

Discussion of Impacts

V a, b, and c). CEQA Guidelines state that generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources including the following:

A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

B. Is associated with the lives of persons important in our past;

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;

D. Has yielded or may be likely to yield information important in prehistory or history (CEQA Guidelines §15064.5).

Generally, resources (buildings, structures, equipment) that are less than 50 years old are excluded from listing in the National Register of Historic Places unless they can be shown to be exceptionally important. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters or other particulate control equipment), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. Any new equipment is expected to be compatible with the existing industrial/commercial character of the area where the existing sources are located.

No extensive construction or demolition activities or grading is expected to occur to install air pollution control equipment or implement emission reduction measures associated with the proposed rule amendments. Some affected facilities may have equipment or structures older than 50 years and may modify existing structures, (e.g., gasoline stations). However, this type of equipment usually does not meet the criteria identified in CEQA Guidelines §15064.5(a)(3) as historic resources.

No extensive construction or demolition activities or grading is expected to occur to install air pollution control equipment or implement emission reduction measures associated with the proposed rule amendments. These areas have already been graded and developed, and no substantial grading is expected to be required to implement the proposed rule amendments which could include the use of diesel particulate filters or other particulate control equipment, cleaner engines, or a reduction in operating times or throughput. Relocating emission sources would require minor construction activities, but those activities would still occur within the existing commercial or industrial area which has already been graded. Thus, the proposed rule amendments would not be expected to adversely affect historical or archaeological resources as defined in CEQA Guidelines §15064.5, or disturb human remains interred outside formal cemeteries. Therefore, no significant impacts to cultural resources are anticipated to occur as a result of the proposed project as no major construction activities are expected to be required.

Conclusion

Based upon these considerations, no significant adverse impacts to cultural resources are expected due to implementation of proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

Pacific Gas and Electric Company (PG&E) supplies electricity to over five million customers in central and northern California. The counties within the Air District (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma) used over 55,400 gigawatt/hours (millions of kilowatt/hours) in 2019[2]. Residential electricity use accounts for approximately 30 percent of the electrical use and non-residential use accounts for approximately 70 percent. PG&E's electricity is supplied by natural gas power plants, nuclear generation, large hydroelectric facilities, and renewable sources (e.g., wind, geothermal, biomass, and small hydroelectric power).

In 2019, in California, approximately 43 percent of electricity was generated by natural gas, 32 percent was generated by renewables, 17 percent was generated by hydroelectric facilities, 8 percent was generated by nuclear, and 0.1 percent was generated by coal.[3]

In 2019, the counties within the Air District used approximately 2,950 million therms of natural gas.[4] Residential use accounts for approximately 37 percent of natural gas consumption, and non-residential use accounts for approximately 63 percent of natural gas use in Alameda County.

Regulatory Background

Energy efficiency requirements are primarily regulated at the state level. Title 24, California's Energy Efficiency Standards for Residential and Non-residential Buildings, details requirements to achieve minimum energy efficiency standards. The standards apply to new construction of both

[2] California Energy Commission, Electricity Consumption by County. Available at https://ecdms.energy.ca.gov/elecbycounty.aspx
[3] California Energy Commission, Total System Electric Generation. Available at: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation/2019l
[4] California Energy Commission, Gas Consumption by County. Available at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx

residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Compliance with these standards is verified and enforced through the local building permit process.

Some local cities within the Bay Area have developed and implemented green building ordinances, energy and climate action plans, and sustainability plans that address energy efficiency, such as the cities of Belmont, Benicia, Martinez, Oakland, Palo Alto, Richmond, San Francisco, South San Francisco, and Walnut Creek, as well the counties of Marin and Contra Costa, among others.

Significance Criteria

The impacts to energy will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion of Impacts

6. a and b) The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks.

The amendments to Rules 2-1 and 2-5 are not expected to require new equipment but may require air pollution control measures. Most of the measures that may be required are not expected to require an increase in electricity or natural gas. For example, Tier 4 diesel engines may be required instead of Tier 3 diesel engines. A Tier 4 engine would not use additional energy (diesel fuel) than a Tier 3 engine. Relocation of equipment would not require additional energy. A reduction in operating hours for a gas station, for example, would likely use less energy than full operating hours. The types of equipment that are expected to be predominately required under the proposed rule amendments are not expected to require any substantial increase in electricity or natural gas. The amendments to Rules 2-1 and 2-5 are expected to predominately apply to emergency diesel engines used during electrical outages so switching to electricity is not expected to be an option for emergency engines.

Should larger facilities fall into Rules 2-1 and 2-5, other types of air pollution control measures could be required, e.g., baghouses and spray mist systems for particulate control. Baghouses require the use of electricity and could require an estimated 55,000 to 60,000 kilowatt-hours per year or 0.055 to 0.060 gigawatt-hours per year or less and 0.0001 percent of the electricity use in the Bay Area. None of the control measures are expected to require additional natural gas. Therefore, the proposed rule amendments are not expected to conflict with an energy conservation or renewable energy plan and the state will continue to move toward the increased use of renewable energy sources, reducing GHG emissions statewide. For example, California has adopted the "Renewable Portfolio Standard" for electric power which requires that at least 33 percent of the state's electric power come from renewable sources by 2020, and at least 50 percent must come from renewables by 2030. The proposed amendments to Rules 2-1 and 2-5 2 would not be expected to interfere or impact compliance with these state requirements.

Conclusion

Based upon these considerations, no significant adverse impacts to energy resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

California has 11 natural geologic regions, known as geomorphic provinces, which are defined by the presence of similar physical characteristics, such as relief, landforms, and geology. Most of the Bay Area is located within the natural region of California known as the Coast Ranges geomorphic province, with the eastern portions of Contra Costa and Alameda Counties extending into the neighboring Great Valley geomorphic province, located east of the Coast Ranges. The Coast Range extends about 400 miles from Oregon south into Southern California and is characterized by a series of northwest trending ridges and valleys that roughly parallel the San Andreas fault zone. The San Francisco Bay is a broad, shallow regional structural depression created from an east-west expansion between the San Andreas and the Hayward fault systems.

Much of the Coast Range province is composed of marine sedimentary and volcanic rocks located east of the San Andreas Fault. The region west of the San Andreas Fault is underlain by a mass of basement rock that is composed of mainly marine sandstone and various metamorphic rocks. Marginal lands surrounding San Francisco Bay consist generally of alluvial plains of low relief that slope gently towards the bay from bordering uplands and foothills (ABAG, 2017). Unconsolidated alluvial deposits, artificial fill, and estuarine deposits, (including Bay Mud) underlie the low-lying region along the margins of the Carquinez Straight and Suisun Bay. The organic, soft, clay-rich sediments along the San Francisco and San Pablo Bays are referred to locally as Bay Mud and can present a variety of engineering challenges due to inherent low strength, compressibility and saturated conditions. Landslides in the region occur in weak, easily weathered bedrock on relatively steep slopes.

The San Francisco Bay Area is a seismically active region, which is situated on a tectonic plate boundary marked by the San Andreas Fault System. Several northwest trending active and potentially active faults are included with this fault system. Under the Alquist-Priolo Earthquake Fault Zoning Act, Earthquake Fault Zones were established by the California Division of Mines and Geology along “active” faults, or faults along which surface rupture occurred in Holocene time (the last 11,000 years). The San Andreas and the Hayward faults are the two faults considered to have the highest probabilities of causing a significant seismic event in the Bay Area. These two faults are classified as strike-slip faults that have experienced movement within the last 150 years. Other faults include the Rodgers Creek-Healdsburg, Concord-Green Valley, Marsh Creek-Greenville, San Gregorio-Hosgri, West Napa and Calaveras faults (ABAG, 2017). A major seismic event on any of these active faults could cause significant ground shaking and potential surface fault rupture. Other smaller faults in the region classified as potentially active include the Southampton and Franklin faults.

Ground movement intensity during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geological material. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill. Earthquake ground shaking may have secondary effects on certain foundation materials, including liquefaction, seismically induced settlement, and lateral spreading.

Important vertebrate and invertebrate fossils and unique geologic units have been documented throughout California. The fossil yielding potential of a particular area is highly dependent on the

geologic age and origin of the underlying rocks. Pleistocene or older (older than 11,000 years) continental sedimentary deposits are considered to have a high paleontological potential while Holocene-age deposits (less than 10,000 year old) are generally considered to have a low paleontological potential because they are geologically immature and are unlikely to contain fossilized remains of organisms. Metamorphic and igneous rocks have a low paleontological potential, either because they formed beneath the surface of the earth (such as granite), or because they have been altered under heat and high pressures (ABAG, 2017).

Regulatory Background

Construction is regulated by the local City or County building codes that provide requirements for construction, grading, excavations, use of fill, and foundation work including type of materials, design, procedures, etc., which are intended to limit the probability of occurrence and the severity of consequences from geological hazards. Necessary permits, plan checks, and inspections are generally required.

The City or County General Plan includes the Seismic Safety Element. The Element serves primarily to identify seismic hazards and their location in order that they may be taken into account in the planning of future development. The California Building Code is the principal mechanism for protection against and relief from the danger of earthquakes and related events.

In addition, the Seismic Hazard Zone Mapping Act (Public Resources Code §§2690 – 2699.6) was passed by the California legislature in 1990 following the Loma Prieta earthquake. The Act required that the California Division of Mines and Geology (DMG) develop maps that identify the areas of the state that require site specific investigation for earthquake-triggered landslides and/or potential liquefaction prior to permitting most urban developments. The act directs cities, counties, and state agencies to use the maps in their land use planning and permitting processes.

Local governments are responsible for implementing the requirements of the Seismic Hazards Mapping Act. The maps and guidelines are tools for local governments to use in establishing their land use management policies and in developing ordinances and reviewing procedures that will reduce losses from ground failure during future earthquakes.

Significance Criteria

The proposed project impacts on the geological environment will be considered significant if:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.

- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion of Impacts

VI a, c, and d). The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to communities overburdened with cumulative air quality impacts. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks.

Geologic hazards are expected to be minimal as no major construction activities are expected to be required. Any new construction (including modifications to existing structures) requires compliance with the California Building Code. The California Building Code is considered to be a standard safeguard against major structural failures and loss of life. The goal of the code is to provide structures that will: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage, but with some non-structural damage; and (3) resist major earthquakes without collapse, but with some structural and non-structural damage. The California Building Code basis seismic design on minimum lateral seismic forces ("ground shaking"). The California Building Code requirements operate on the principle that providing appropriate foundations, among other aspects, helps to protect buildings from failure during earthquakes. The basic formulas used for the California Building Code seismic design require determination of the seismic zone and site coefficient, which represent the foundation conditions at the site. Compliance with the California Building Code would minimize the impacts associated with existing geological hazards.

VI b). The proposed rule amendments are expected to result in additional control measures at existing facilities. Any construction activities are expected to take place at already existing facilities that have been previously graded. Thus, the proposed rule amendments are not expected to result in substantial soil erosion or the loss of topsoil as construction activities are expected to be limited to existing industrial or commercial areas that have been previously graded and developed.

VI e). Septic tanks or other similar alternative wastewater disposal systems are typically associated with small residential projects in remote areas. The proposed rule amendments would affect existing and new facilities that have existing wastewater treatment systems or connected to appropriate wastewater facilities. Additionally, facilities affected by the proposed rule amendments are expected to be connected to appropriate wastewater treatment facilities and are not expected to rely on septic tanks or similar alternative wastewater disposal systems. Based on these considerations, septic tanks or other alternative wastewater disposal systems are not expected to be impacted by the proposed project.

VI f). Construction activities associated with the proposed rule amendments are expected to occur at primarily existing facilities in industrial/commercial areas. These areas have already been

graded and developed, and no substantial grading is expected to be required to implement amendments to Rules 2-1 and 2-5. Thus, the proposed rule amendments would not be expected to adversely affect paleontological resources. Therefore, no significant impacts to paleontological resources are anticipated to occur as a result of the proposed rule amendments as no major construction activities are expected to be required.

Conclusion

Based upon these considerations, no significant adverse impacts to geology and soils are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

Global climate change refers to changes in average climatic conditions on the earth as a whole, including temperature, wind patterns, precipitation and storms. Global climate change is caused primarily by an increase in levels of greenhouse gases (GHGs) in the atmosphere. The major greenhouse gases are the so-called "Kyoto Six" gases – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs) – as well as black carbon.[5] These greenhouse gases absorb longwave radiant energy (heat) reflected by the earth, which warms the atmosphere in a phenomenon known as the "greenhouse effect." The potential effects of global climate change include rising surface temperatures, loss in snow pack, sea level rise, ocean acidification, more extreme heat days per year, and more drought years.

Increases in the combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.) since the beginning of the industrial revolution have resulted in a significant increase in atmospheric levels of GHGs. CO_2 levels have increased from long-term historical levels of around 280 ppm before the mid-18th century to over 400 ppm today. This increase in GHGs has already caused noticeable changes in the climate. The average global temperature has risen by approximately 1.4°F (0.8°C) over the past one hundred years, and 16 of the 17 hottest years in recorded history have occurred since 2001, according to the National Oceanic and Atmospheric Administration.

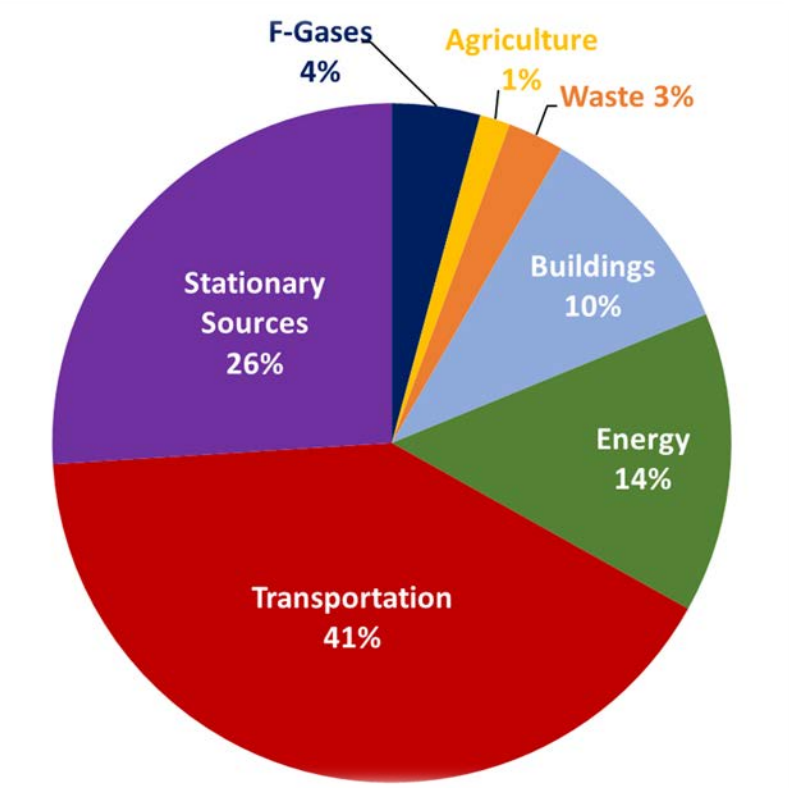
Total global GHG emissions contributing to climate change are in the tens of billions of metric tons of carbon dioxide equivalent (CO_2e) emissions per year. The Bay Area's contribution to the global total is approximately 85 million tons per year. Figure 3-2 presents a breakdown of the

[5] Technically, black carbon is not a gas but is made up of solid particulates or aerosols. It is included in the discussion of greenhouse gas emissions because, like true greenhouse gases, it is an important contributor to global climate change.

region's GHG emissions by major source categories. Transportation sources generate approximately 40 percent of the total, with the remaining 60 percent coming from stationary and area sources (see Figure 3-2).

FIGURE 3-2

2015 Bay Area GHG Emissions by Source Category (Total = 85 MMT CO_2e)

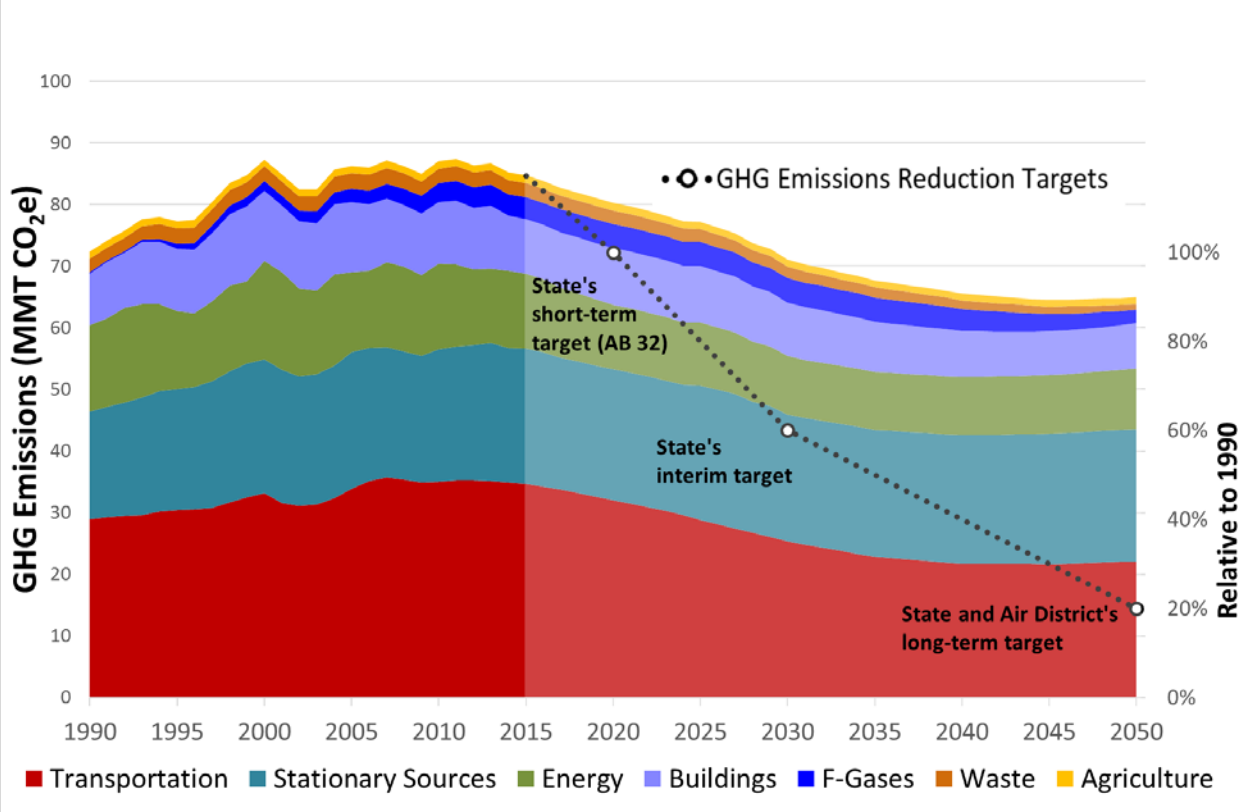


Source: BAAQMD, 2017b

Historically, regional GHG emissions rose substantially as the Bay Area industrialized. But emissions have peaked recently, and they are expected to decline in the coming years. Figure 3-3 shows the Bay Area's total GHG emissions since 1990, with projections for future emissions through 2050. As the figure shows, emissions are expected to decline in the future as the region continues to shift away from burning fossil fuels and towards renewable energy resources such as wind and solar power. Emissions will need to decline even more than currently projected, however, in order to reach the aggressive targets adopted by California and by the Air District. These GHG reduction goals are represented by the dashed line on the graph in Figure 3-3.

FIGURE 3-3

Projected Bay Area GHG Emissions by Sector Based on State Policies



Source: BAAQMD, 2017b

Regulatory Background

There is a general consensus that global temperature increases must be limited to well under 2°C in order to reduce the risks and impacts of climate change to an acceptable level. Limiting global climate change to no more than this amount drives GHG regulation at every level.

For purposes of the Bay Area, the most important regulatory actions on climate change have been undertaken by the State of California. To fulfill its share of the burden of keeping climate change within acceptable limits, California has committed to reducing its GHG emissions to 1990 levels by 2020, to 40 percent below 1990 levels by 2030, and to 80 percent below 1990 levels by 2050. This commitment is enshrined in AB 32, the Global Warming Solutions Act of 2006, which adopted the 2020 target; in 2016's SB 32 (Pavley), which adopted the 2030 target; and in Executive Order S-3-05, which adopted the 2050 target. The Air District has adopted the same 80 percent reduction target for 2050 for the Bay Area's GHG emissions, in Board of Directors Resolution 2013-11.

To achieve these emission reduction goals, the California legislature has directed the California Air Resources Board (CARB) to develop a Scoping Plan setting forth regulatory measures that CARB will implement, along with other measures, to reduce the state's GHG emissions. One of

the principal regulatory measures is CARB's Cap and Trade program, which requires industrial GHG sources to obtain "allowances" equal to their GHG emissions. The amount of available allowances is subject to a "cap" on total emissions statewide, which CARB will reduce each year. Regulated facilities will either have to reduce their emissions or purchase allowances on the open market, which will give them a financial incentive to reduce emissions and will ensure that total annual emissions from the industrial sector will not exceed the declining statewide cap.

California has also adopted the so-called "Renewable Portfolio Standard" for electric power generation, which requires that at least 33 percent of the state's electric power must come from renewable sources by 2020, and at least 50 percent must come from renewables by 2030. To complement these efforts on electricity generation, the state has also committed to increasing the energy efficiency of existing buildings by 50 percent by 2050 in order to reduce energy demand.

California has also adopted regulatory measures aimed at reducing GHG emissions from mobile sources. These measures include the so-called "Pavley" standards for motor vehicle emissions and the state's Low Carbon Fuel Standard, which set limits on the carbon intensity of transportation fuels. California has also adopted SB 375, the Sustainable Communities and Climate Protection Act of 2008, which requires regional transportation and land use planning agencies to develop coordinated plans, called "Sustainable Communities Strategies," to reduce GHG emissions from the transportation sector by promoting denser development and alternatives to driving. The current Sustainable Communities Strategy for the Bay Area is *Plan Bay Area 2040*, was adopted by the Metropolitan Transportation Commission and the Association of Bay Area Governments in July of 2017 (ABAG, 2017).

The Air District supports these statewide goals through action at the regional level. The Air District has committed to reducing the Bay Area's regional GHG emissions to 80 percent below 1990 levels by 2050, as noted above. The Air District has also committed to a broad suite of specific measures to address GHGs in the 2017 Clean Air Plan, *Spare the Air, Cool the Climate*. That document lays out the Air District's vision for what the Bay Area may look like in a post-carbon year 2050 and describes policies and actions that the region needs to take in the near- to mid-term to achieves these goals.

Significance Criteria

The Air District's May 2017 CEQA Air Quality Guidelines (BAAQMD, 2017a) established GHG thresholds for specific projects, general plans, and regional plans. An air quality rule does not fall neatly into any of these categories. Air quality rules are typically regional in nature, as opposed to general plans and community plans. In addition, air quality rules are usually specific to particular source types and particular pollutants.

The Air District's May 2017 CEQA Air Quality Guidelines (BAAQMD, 2017a) established a GHG threshold for air quality plans of "no net increase in emissions," which is appropriate for air quality plans because they include a mix of control measures with individual trade-offs. For example, one control measure may result in combustion of methane to reduce GHG emissions, while increasing criteria pollutant combustion emissions by a small amount. Those increases from the methane measure would be offset by decreases from other measures focused on reducing

criteria pollutants. In a particular rule development effort, there may not be opportunities to make these trade-offs.

The project level GHG threshold for stationary source projects is 10,000 metric tons of carbon dioxide equivalent (CO_2eq) emissions under the Air District CEQA Guidelines. This threshold is expected to capture approximately 95 percent of all GHG emissions from new permit applications from stationary sources within the jurisdiction of the Air District. The threshold level was calculated as an average of the combined CO_2 emissions from all stationary source permit applications submitted to the Air District during the three-year analysis period (BAAQMD, 2017a). The project-level GHG significance thresholds of 10,000 MT CO_2eq will be used to evaluate the cumulative GHG impacts associated with proposed amendments to Rule 2-1 and Rule 2-5.

Discussion of Impacts

VII a. The analysis of GHG emissions is a different analysis than for criteria pollutants for the following reasons. For criteria pollutant, significance thresholds are based on daily emissions because attainment or non-attainment is typically based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects to human health, e.g., one-hour and eight-hour. Using the half-life of CO_2, 100 years for example, the effects of GHGs are longer-term, affecting the global climate over a relatively long timeframe. GHGs do not have human health effects like criteria pollutants. Rather, it is the increased accumulation of GHGs in the atmosphere that may result in global climate change. Due to the complexity of conditions and interactions affecting global climate change, it is not possible to predict the specific impact, if any, attributable to GHG emissions associated with a single project. Furthermore, the GHG emissions associated with the proposed rule amendments would be small relative to total global or even state-wide GHG emissions. Thus, the significance of potential impacts from GHG emissions related to the proposed project has been analyzed for long-term operations on a cumulative basis, as discussed below.

The overall objective of the proposed amendments to Rules 2-1 and 2-5 is to reduce TAC and PM emissions from stationary sources, primarily in or adjacent to overburdened communities. The proposed rule amendments will reduce emissions by requiring applicable sources to implement air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks.

Construction would likely require truck trips to deliver equipment, a construction crew of five to twenty workers, and a few pieces of construction equipment (e.g., cranes, forklift, aerial lifts, welders, and hand tools). The construction associated with the modified the rules are divided into two types of construction, small projects and large projects. Modifications to or the relocation of diesel engines and changes to stacks would be considered small projects. Construction of new air pollution control equipment or resizing existing air pollutions control equipment for facilities are considered large projects. Small projects are expected to take only a single day. Large projects are expected to take one month (20 working days). Annual construction emissions are based on 14 small projects and 1 large project.

The operation of the air pollution control equipment is not expected to generate any new GHG emissions since no new fired sources are expected. The GHG emission calculations assume one large project per year would be required and would use electricity for operations. Table 3-5 summarizes only the increases in operational GHG emission associated with amendments to Rules 2-1 and 2-5. See Appendix A for detailed emissions calculations.

TABLE 3-5

Greenhouse Gas Emissions Increases
(metric tons/yr)

Activity	**CO_2e**
Construction (Annual)	110.0
Operations	28.0
Total	138.0
BAAQMD Significance Threshold	10,000
Significant?	**No**

See Appendix A for detailed emission calculations.

The increases in GHG emissions associated with the construction and operation of the amendments to Rules 2-1 and 2-5 are expected to be less than the GHG CEQA threshold and, therefore, not expected to make a cumulatively considerable contribution to a significant cumulative impact caused by GHG emissions.

VII b. The amendments to Rules 2-1 and 2-5 will not conflict with any plans, policies, or regulations addressing climate change. As discussed above, applicable plans, policies and regulations are aimed at limiting global climate change to well under 2°C, and at reducing regional and state-wide emissions to 80 percent below 1990 levels by 2050 in order to achieve that goal. The amendments to Rules 2-1 and 2-5 will not conflict with the Bay Area's progress towards achieving that emission reduction target. In fact, it would implement portions of the 2017 Clean Air Plan and is intended to create a consistent regulatory framework for these operations. Further, the amendments to Rules 2-1 and 2-5 will not require affected facilities to make any substantial changes that would increase their GHG emissions, and they will not conflict with any regulatory efforts to achieve the state and regional GHG emission reduction goals under CARB's Scoping Plan, the District's 2017 Clean Air Plan, *Plan Bay Area 2040*, or any other local climate action plan.

Conclusion

Based upon these considerations, no significant adverse GHG impacts are expected due to implementation of the amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and potions of western Solano and southern Sonoma Counties. Because the area of coverage is vast (approximately 5,600 square miles), land uses vary greatly and include commercial, industrial, residential, and agricultural uses.

Facilities and operations within the District handle and process substantial quantities of flammable materials and acutely toxic substances. Accidents involving these substances can result in worker or public exposure to fire, heat, blast from an explosion, or airborne exposure to hazardous substances.

Fires can expose the public or workers to heat. The heat decreases rapidly with distance from the flame and, therefore, poses a greater risk to workers at specific facilities where flammable materials and toxic substances are handled than to the public. Explosions can generate a shock wave, but the risks from explosion also decrease with distance. Airborne releases of hazardous materials may affect workers or the public, and the risks depend upon the location of the release, the hazards associated with the material, the winds at the time of the release, and the proximity of sensitive populations, e.g., residences, hospitals, and schools.

For all facilities and operations handling flammable materials and toxic substances, risks to the public are reduced if there is a buffer zone between process or storage units and sensitive populations or if prevailing winds blow away from them. Thus, the risks posed by operations at a given facility or operation are unique and determined by a variety of factors.

Hazards are related to the risks of fire, explosions, or releases of hazardous substances in the event of accident or upset conditions. Hazards are related to the production, use, storage, and transport of hazardous materials. Industrial production and processing facilities are potential sites for hazardous materials. Some facilities produce hazardous materials as their end product, while others use such materials as an input to their production processes. Examples of hazardous materials used by consumers include fuels, paints, paint thinner, nail polish, and solvents. Hazardous materials may be stored at facilities producing such materials and at facilities where hazardous materials are part of the production processes. Currently, hazardous materials are transported throughout the Bay Area in great quantities via all modes of transportation including rail, highway, water, air, and pipeline.

Regulatory Background

There are many federal and state rules and regulations that facilities handling hazardous materials must comply with which serve to minimize the potential impacts associated with hazards at these facilities.

Under the Occupational Safety and Health Administration (OSHA) regulations [29 Code of Federal Regulations (CFR) Part 1910], facilities which use, store, manufacture, handle, process, or move highly hazardous materials must prepare a fire prevention plan. In addition, 29 CFR Part 1910.119, Process Safety Management (PSM) of Highly Hazardous Chemicals, and Title 8 of the

California Code of Regulations, General Industry Safety Order §5189, specify required prevention program elements to protect workers at facilities that handle toxic, flammable, reactive, or explosive materials.

Section 112 (r) of the Clean Air Act Amendments of 1990 [42 U.S.C. 7401 et. Seq.] and Article 2, Chapter 6.95 of the California Health and Safety Code require facilities that handle listed regulated substances to develop Risk Management Programs (RMPs) to prevent accidental releases of these substances, U.S. EPA regulations are set forth in 40 CFR Part 68. In California, the California Accidental Release Prevention (CalARP) Program regulation (CCR Title 19, Division 2, Chapter 4.5) was issued by the Governor's Office of Emergency Services (OES). RMPs are documents prepared by the affected owner or operator of a stationary source containing detailed information including: (1) regulated substances held onsite at the stationary source; (2) offsite consequences of an accidental release of a regulated substance; (3) the accident history at the stationary source; (4) the emergency response program for the stationary source; (5) coordination with local emergency responders; (6) hazard review or process hazard analysis; (7) operating procedures at the stationary source; (8) training of the stationary source's personnel; (9) maintenance and mechanical integrity of the stationary source's physical plant; and (10) incident investigation. California updated the CalARP Program in October 2017, along with the state's PSM program, in response to an accident at the Chevron Richmond Refinery.

Affected facilities that store materials are required to have a Spill Prevention Control and Countermeasures (SPCC) Plan per the requirements of 40 Code of Federal Regulations, Section 112. The SPCC is designed to prevent spills from on-site facilities and includes requirements for secondary containment so spilled materials would not migrate off-site, provides emergency response procedures, establishes training requirements, and so forth.

The Hazardous Materials Transportation (HMT) Act is the federal legislation that regulates transportation of hazardous materials. The primary regulatory authorities are the U.S. Department of Transportation, the Federal Highway Administration, and the Federal Railroad Administration. The HMT Act requires that carriers report accidental releases of hazardous materials to the Department of Transportation at the earliest practical moment (49 CFR Subchapter C). The California Department of Transportation (Caltrans) sets standards for trucks in California. The regulations are enforced by the California Highway Patrol, among others.

California Health and Safety Code Section 25500 et seq., codifying Assembly Bill 2185 (Maxine Waters 1985), requires local agencies to regulate the storage and handling of hazardous materials and requires development of a business plan to mitigate the release of hazardous materials. Businesses that handle any of the specified hazardous materials must submit to government agencies (i.e., fire departments), an inventory of the hazardous materials, an emergency response plan, and an employee training program. The information in the business plan can then be used in the event of an emergency to determine the appropriate response action, the need for public notification, and the need for evacuation.

Contra Costa County has adopted an industrial safety ordinance that addresses the human factors that lead to accidents. The ordinance requires stationary sources to develop a written human

factors program that considers human factors as part of process hazards analyses, incident investigations, training, and operating procedures, among others.

Significance Criteria

The proposed project impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance with National Fire Protection Association standards.
- Non-conformance with regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Discussion of Impacts

VIII a - b. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), uses cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of control measures would not introduce any new hazards or require the use of hazardous materials during either construction or operational activities. Further, any new equipment is expected to be compatible with the existing industrial/commercial character of the area.

Health and Safety Code §25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

- Types of hazardous materials used and their locations;
- Training programs for employees including safe handling of hazardous materials and emergency response procedures and resources.
- Procedures for emergency response notification;

- Proper use of emergency equipment;
- Procedures to mitigate a release or threatened release of hazardous materials and measures to minimize potential harm or damage to individuals, property, or the environment; and
- Evacuation plans and procedures.

Hazardous materials at existing facilities would continue to be used in compliance with established OSHA or Cal/OSHA regulations and procedures, including providing adequate ventilation, using recommended personal protective equipment and clothing, posting appropriate signs and warnings, and providing adequate worker health and safety training. The exposure of employees is regulated by Cal-OSHA in Title 8 of the CCR. Specifically, 8 CCR 5155 establishes permissible exposure levels (PELs) and short-term exposure levels (STELs) for various chemicals. These requirements apply to all employees. The PELs and STELs establish levels below which no adverse health effects are expected. These requirements protect the health and safety of the workers, as well as the nearby population including sensitive receptors.

In general, all local jurisdictions and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area.

The above regulations provide comprehensive measures to reduce hazards of explosive or otherwise hazardous materials. Compliance with these and other federal, state and local regulations and proper operation and maintenance of equipment should ensure the potential for accidental releases of hazardous materials is not significant. Further, the proposed amendments to Rules 2-1 and 2-5 are not expected to require handling additional types of hazardous materials. Therefore, the proposed amendments to Rules 2-1 and 2-5 are not expected to create a significant hazard to the public or environment.

VIII c. Schools may be located within a quarter mile of facilities affected by the proposed rules amendments. The proposed amendments to Rules 2-1 and 2-5 are not expected to result in the construction or operation of equipment or result in modifications to existing equipment, that would generate hazardous emissions, or result in the handling of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school. The proposed rule amendments are expected to result in a reduction in TAC emissions and a reduction in the related health risk associated with exposure to TAC emissions in overburdened communities, providing emission and health benefits. Therefore, no increase in hazardous emissions is expected due to implementation of the proposed amendments to Rule 2-1 and 2-5.

VIII d. Government Code §65962.5 requires creation of lists of facilities that may be subject to Resource Conservation and Recovery Act (RCRA) permits or site cleanup activities. It is not

known if the affected stationary sources are located on the hazardous materials sites list pursuant to Government Code §65962.5. However, the proposed rule amendments would not interfere with site cleanup activities or create additional site contamination, and would not be expected to create a significant hazard to the public or environment.

VIII e. The proposed rule amendments would not result in a safety hazard for people residing or working within two miles of a public airport. No impacts on airports or airport land use plans are anticipated from implementation of the amendments to Rules 2-1 and 2-5. Modifications are expected to be confined to the existing industrial/commercial land uses. Therefore, no significant adverse impacts on an airport or airport land use plan are expected.

VIII f. Modifications may be required to implement air pollution control measures at facilities affected by the amendments to Rules 2-1 and 2-5. The construction of air pollution control equipment would be expected to occur in existing industrial or commercial areas. Implementation of these types of control measures would not be expected to interfere with an adopted emergency response plan or emergency evacuation plan or require street closures that could impact emergency response activities. Therefore, implementation of the proposed rule amendments would not be expected to impair implementation of interfere with an adopted emergency response plan or emergency evacuation plan.

VIII g. Facilities affected by the proposed amendments to Rules 2-1 and 2-5 may be adjacent to wildlands. The proposed rule amendments are not expected to generate additional development that would place structures closer to wildland areas as it would require air pollution control equipment and measures at existing facilities. It is expected that facilities adjacent to wildland areas take appropriate and required actions to protect their property from wildland fires. The proposed rule amendments would not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees, nor would it increase fire risk by increasing the use of flammable materials. The proposed amendments to Rules 2-1 and 2-5 are not expected to expose people or structures to wild fires. Therefore, no significant increase in fire hazards is expected due to the proposed new rule.

Conclusion

Based upon these considerations, no significant adverse impacts to hazards and hazardous materials are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles). Reservoirs and drainage streams are

located throughout the area within the BAAQMD's jurisdiction, and discharge into the Bays. Marshlands incised with numerous winding tidal channels containing brackish water are located throughout the Bay Area.

The San Francisco Bay estuary system is one of the largest in the country and drains approximately 40 percent of California. Water from the Sacramento and San Joaquin Rivers of the Central Valley flow into what is known as the Delta region, then into the sub-bays, Suisun Bay and San Pablo Bay, and finally into the Central Bay and out the Golden Gate strait. The Delta is a large triangle of interconnected sloughs and agricultural "islands" that forms a key link in California's water delivery system. Some of the fresh water flows through the Delta and into Bay, but much is diverted from the Bay for agricultural, residential, and industrial purposes, as well as delivery to distant cities of southern California as part of state and federal water projects (ABAG, 2017).

The two major drainages, the Sacramento and San Joaquin Rivers receive more than 90 percent of runoff during the winter and spring months from rainstorms and snow melt. San Francisco Bay encompasses approximately 1,600 square miles and is surrounded by the nine Bay Area counties of which seven border the Bay. Other surface waters flow either directly to the Bay or Pacific Ocean. The drainage basin that contributes surface water flows directly to the Bay covers a total area of 3,464 square miles. The largest watersheds include Alameda Creek (695 square miles), the Napa River (417 square miles), and Coyote Creek (353 square miles) watersheds. The San Francisco Bay estuary includes deep-water channels, tidelands, and marshlands that provide a variety of habitats for plants and animals. The salinity of the water varies widely as the landward flows of saline water and the seaward flows of fresh water converge near the Benicia Bridge. The salinity levels in the Central Bay can vary from near oceanic levels to one quarter as much, depending on the volume of freshwater runoff (ABAG 2017).

Surface waters in the Bay Area include freshwater rivers and streams, coastal waters, and estuarine waters. Estuarine waters include the San Francisco Bay Delta from the Golden Gate Bridge to the Sacramento and San Joaquin Rivers, and the lower reaches of various streams that flow directly into the Bay, such as the Napa and Petaluma Rivers in the North Bay and the Coyote and San Francisquito Creeks in the South Bay (ABAG, 2017).

The Bay Area region is divided into a total of 28 groundwater basins. The ten primary groundwater basins in the Bay Area are the Petaluma Valley, Napa-Sonoma Valley, Suisun-Fairfield Valley, San Joaquin Valley, Clayton Valley, Diablo Valley, San Ramon Valley, Livermore Valley, Sunol Valley, and Santa Clara Valley basins. Groundwater in the region is used for numerous purposes, including municipal and industrial water supply. However, groundwater use accounts for only about five percent of the total water usage (ABAG, 2017).

Together, surface water and ground water supply approximately 31 percent of Bay Area water. Surface water from local rivers and streams (including the Delta) is an important source for all Bay Area Water agencies, but particularly in the North Bay counties, where access to imported water is more limited because of infrastructure limitations. The greatest proportion of Bay Area water is imported from Sierra Nevada and Delta sources, comprising approximately 66 percent of supply. The primary Sierra Nevada sources are the Mokelumne River and Tuolumne River watersheds. Several Bay Area water agencies receive Delta water through the State and Central

Valley Water Projects, which comprise a vast network of canals and aqueducts for the delivery of water throughout the Bay Area and the Central Valley (ABAG, 2017).

The use of recycled water in the Bay Area has come to be widely used for a number of applications, including landscape irrigation, agricultural uses, commercial and industrial purposes and as a supply to the area's wetlands. The Alameda County Water District operates the Newark Desalination Facility which supplies approximately 12.5 million gallons per day to the distribution system (ABAG, 2017).

Wastewater treatment in the Bay Area is provided by various agencies as well as individual city and towns wastewater treatment systems. Some treatment plants serve individual cities while others serve multiple jurisdictions. More than 50 agencies provide wastewater treatment throughout the Bay Area. Most industrial facilities, including refineries, have wastewater and storm water treatment facilities and discharge treated wastewater under the requirements of National Pollutant Discharge Elimination System (NPDES) permits.

Regulatory Background

The Federal Clean Water Act of 1972 primarily establishes regulations for pollutant discharges into surface waters in order to protect and maintain the quality and integrity of the nation's waters. This Act requires industries that discharge wastewater to municipal sewer systems to meet pretreatment standards. The regulations authorize the U.S. EPA to set the pretreatment standards. The regulations also allow the local treatment plants to set more stringent wastewater discharge requirements, if necessary, to meet local conditions.

The 1987 amendments to the Clean Water Act enabled the U.S. EPA to regulate, under the NPDES program, discharges from industries and large municipal sewer systems. The U.S. EPA set initial permit application requirements in 1990. The State of California, through the State Water Resources Control Board, has authority to issue NPDES permits, which meet U.S. EPA requirements, to specified industries.

The Porter-Cologne Water Quality Act is California's primary water quality control law. It implements the state's responsibilities under the Federal Clean Water Act but also establishes state wastewater discharge requirements. The Regional Water Quality Control Board administers the state requirements as specified under the Porter-Cologne Water Quality Act, which include storm water discharge permits. The water quality in the Bay Area is under the jurisdiction of the San Francisco Bay Regional Water Quality Control Board.

In response to the Federal Act, the State Water Resources Control Board prepared two state-wide plans in 1991 and 1995 that address storm water runoff: the California Inland Surface Waters Plan and the California Enclosed Bays and Estuaries Plan, which have been updated in 2005 as the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. Enclosed bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. San Francisco Bay, and its constituent parts, including Carquinez Strait and Suisun Bay, fall under this category.

The San Francisco Bay Basin Plan identifies the: (1) beneficial water uses that need to be protected; (2) the water quality objectives needed to protect the designated beneficial water uses; and (3) strategies and time schedules for achieving the water quality objectives. The beneficial uses of the Carquinez Strait that must be protected include water contact and non-contact recreation, navigation, ocean commercial and sport fishing, wildlife habitat, estuarine habitat, fish spawning and migration, industrial process and service supply, and preservation of rare and endangered species. The Carquinez Strait and Suisun Bay are included on the California list as impaired water bodies due to the presence of chlordane, copper, DDT, diazinon, dieldrin, dioxin and furan compounds, mercury, nickel, PCBs, and selenium.

Significance Criteria

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 263,000 gallons per day of potable water.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion of Impacts

IX a. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks.

The proposed rule amendments are expected to result in additional control measures at existing facilities. Any construction activities are expected to take place at already existing facilities that have been previously graded and would not require any major grading. Water may be misted to keep soil moist, thus minimizing fugitive dust. However, water would not be sprayed in sufficient quantities to generate water runoff that could potentially result in waste discharge or water quality impacts.

The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. Water spray/mist systems for particulate control may be required for larger industrial sources, although it is not expected to be common. Most of the control measures would not require the use of any additional water. While water spray/mist systems use water, create small water droplets that are more effective at contacting small dust particles than water spray systems. Estimates of water mist systems indicate that they are 10-20 times more effective at reducing fugitive dust per gallon of water. Water mist systems produce very small water droplets that come into contact with dust particles. Because the water use is in a very fine mist, the amount of water use is reduced, as compared to a water spray, such that the application of water is minimal and no water runoff is expected. Therefore, the proposed rule amendments are not expected to result in an increase in water runoff, wastewater discharge, would not be expected to result in water quality impacts, and would not result in the degradation of surface water. The proposed rule amendments are not expected to result in any modifications to NPDES permits or result in violation of NPDES permits. Further, the proposed rule amendments would not result in an increase in wastewater that requires treatment and would not impact any wastewater treatment facility.

IX b and e. The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures would not require the use of any additional water. Water spray/mist systems for particulate control may be required for larger industrial sources, although the use of water spray/mist systems are not expected to be common.

No grading or extensive site preparation is expected to be required to construct foundations, for example, thus requiring little or no water for fugitive dust control. Therefore, little or no water for dust suppression purposes is expected to be needed for construction activities under the proposed rule amendments.

The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures would not require the use of any additional water. The installation of water spray/mist systems could be used at larger facilities (e.g., manufacturing facilities, waste transfer facilities, concrete manufacturing facilities, etc.) to minimize particulate emissions. A mist system is estimated to use an average of 6,300 gallons per day (SCAQMD, 2011), for a total increase of 63,000 gallons per day. The water use would be considered significant if it exceeded the CEQA threshold of 263,000 gallons or more of potable water per day. Since the proposed rule

amendments would only be expected to require 2-3 water systems at most (126,000 to 189,000 gallons per day), the water use associated with the proposed amendments to Rules 2-1 and 2-5 will not significantly impact water demand or interfere with groundwater recharge or cause any notable change in the groundwater table level.

IX c. The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. The proposed rule amendments do not have the potential to substantially increase the area subject to runoff since construction will be minor in scope and limited to minor construction activities at existing facilities. The type of emission control measures that would be installed are not expected to result in a substantial increase in impervious surfaces that would result in an increase in water runoff. Additionally, facilities and major construction sites are typically required to develop a SWPPP to address storm water impacts. The proposed rule amendments are also not expected to alter the existing drainage or drainage patterns, result in erosion or siltation, alter the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite as there will be no significant water use. Therefore, no significant adverse impacts to storm water runoff or existing drainage patterns are expected as a result of the proposed rule amendments.

IX d. Proposed amendments to Rules 2-1 and 2-5 would not include the construction of new or relocation of existing housing or other types of facilities and, as such, would not require the placement of housing or other structures within a 100-year flood hazard area. (See also XIII "Population and Housing"). Any construction activities associated with implementation of the proposed rule amendments would occur within the confines of existing facilities and as a result, the proposed project would not be expected to create or substantially increase risks from flooding; expose people or structures to significant risk of loss, injury or death involving flooding; or increase existing risks, if any, of inundation by seiche, tsunami, or mudflow.

Conclusion

Based upon these considerations, no significant adverse impacts to hydrology and water quality are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The land uses surrounding the Bay margins tend to be more intensely developed, particularly from San Francisco south along the Peninsula to Santa Clara County, and Contra Costa County south through Alameda County to Santa Clara County. These areas also include extensive networks of open space. The counties north of the Bay (Marin, Sonoma, and Napa) are more sparsely developed with a combination of suburban development, smaller cities and towns, and agriculture defining the landscape. Other areas of the Bay Area, such as the East Bay and Solano County, tend to be more suburban in character, with heavy industry related to oil refineries dotting the landscape as well as agriculture (ABAG, 2017).

Approximately 18 percent of the region's 4.8 million acres are considered to be urban or built-up land according to the California Farmland Mapping and Monitoring Program. The remaining undeveloped area includes open space and agricultural lands as well as water bodies and parks. Approximately 29 percent of the region is identified as protected open space. The Bay Area includes 101 cities with San Jose, San Francisco, and Oakland representing the largest urbanized centers (ABAG, 2017).

The proposed amendments to Rules 2-1 and 2-5 will affect stationary sources of emissions within an adjacent to overburdened communities. These sources are located in industrial or commercial areas throughout the Bay Area.

Regulatory Background

Land uses are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Significance Criteria

The proposed project impacts will be considered significant on land use and planning if the project conflicts with the land use and zoning designations established by local jurisdictions, or any applicable habitat conservation or natural community conservation plan.

Discussion of Impacts

X a and b. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require existing sources to install air pollution control equipment or implement control measures. The affected sources are expected to be located in commercial or industrial areas and, thus, are not expected to affect land use and planning. All construction would take place at already existing facilities that have been previously graded. Thus, the proposed project would not result in impacts that would physically divide an established community.

The proposed project is expected to primarily affect industrial or commercial areas. Land uses surrounding industrial/commercial areas can vary considerably and include industrial areas, commercial areas, open space, and residential areas. The General Plans and land use plans for areas with industrial land uses, such as Contra Costa County, allow for and encourage the continued use of industrial land uses within their respective communities. Some of the General Plans encourage the modernization of existing industrial areas. The proposed rule amendments would help to minimize TAC emissions which are a potential source of health impacts that may generate land use conflicts, thus providing beneficial health impacts.

Conclusion

Based upon these considerations, no significant adverse land use impacts are expected due to the implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses.

According to the California Department of Conservation Division of Mines and Geology's Aggregate Resources Map, two Aggregate Resource areas are located in the Bay Area. North San Francisco has 492 million tons of permitted aggregate reserves sector nad South San Francisco has 1, 320 million tons of permitted reserves. Other smaller aggregate production areas in the Bay Area include Fremont, Pleasanton, Santa Clara, Santa Cruz, among others (California Geological Survey, 2018).

Regulatory Background

Mineral resources are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Significance Criteria

The proposed project impacts on mineral resources will be considered significant if:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion of Impacts

XI a-b. The proposed amendments to Rules 2-1 and 2-5 are not associated with any action that would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Modifications may be required to implement air pollution control equipment or measures at existing industrial/commercial facilities. Any new equipment or facility modifications associated with the proposed rule amendments are not expected to result in impacts to mineral resources that are of value to the region or result in the loss of a locally important mineral resource site as affected facilities are not expected to be located in areas with mineral resources. Thus, no significant adverse impacts to mineral resources are expected.

Conclusion

Based upon these considerations, no significant adverse impacts to mineral resources are expected due to implementation of proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The ambient noise environment in the urban areas of the Bay Area is defined by a wide variety of noise sources, with the predominant noise source being traffic. Traffic noise exposure is primarily a function of the volume of vehicles per day, the speed of those vehicles, the type of ground surface, the number of those vehicles represented by medium and heavy trucks, the distribution of those vehicles during daytime and nighttime hours, and the proximity of noise-sensitive receptors to the roadway. Existing average traffic noise exposure ranges from 52.1 decibels (dBA) (next to collector and small roads) to as high as 75.9 dBA (next to freeways). Bus transit also contributes to roadway noise levels. In San Francisco, a large portion of the transit bus fleet is electrified and, consequently, the contribution of bus transit to localized roadway noise levels is decreased (ABAG, 2013).

The Bay Area is also presently affected by noise from freight and passenger rail operations. While these operations generate significant noise levels in the immediate vicinity of the railways, train operations are intermittent and area railways are widely dispersed. Commuter rail such as San Francisco Muni Metro and Santa Clara Valley Transportation Authority (VTA) operate with more frequency than standard gauge rail operations but lower speeds resulting in lower noise levels. Bay Area Rapid Transit (BART) operations, on the other hand, can attain higher speeds and have the potential for greater noise levels along extended stretches. Noise levels from rail operations in

the Bay Area can range from 70 dBA to 82 dBA, Community Noise Equivalent Level (CNEL). Train operations may be a source of ground vibration near the tracks (ABAG, 2017).

The Bay Area is home to many airports—including public use, private use, and military facilities. Major airports include San Francisco International, Oakland International and Norman Y. Mineta San José International. In addition to the numerous daily aircraft operations originating and terminating at these facilities, aircraft not utilizing these airports frequently fly over the Bay Area. All of these operations contribute to the overall ambient noise environment. In general, like rail noise, the proximity of the receiver to the airport and aircraft flight path determines the noise exposure. Other contributing factors include the type of aircraft operated, altitude of the aircraft, and atmospheric conditions. Atmospheric conditions may contribute to the direction of aircraft operations (flow) and affect aircraft noise propagation (ABAG, 2017).

Based on the adopted Airport Land Use Compatibility Plan (ALUCP) for San Francisco International Airport, the 65 dBA CNEL contour extends approximately 6 miles northwest of the airport. Based on the ALUCP for Oakland International Airport, the 65 dBA CNEL contour extends approximately 5 miles south of the airport. Based on the ALUCP for Mineta San Jose International Airport, the 65 dBA CNEL contour extends approximately 2.5 miles northwest from the airport. Many other smaller airports and airstrips exist within the Bay Area with widely varying noise levels that contribute to the existing noise environment (ABAG, 2017)

A wide variety of industrial and other non-transportation noise sources are located within the Bay Area. These include manufacturing plants, landfills, treatment plants (e.g., water), power generation facilities, refineries, food packaging plants, lumber mills, and aggregate mining facilities, just to name a few. Noise generated by these sources varies widely, but in many cases may be a significant if not dominant contributor to the noise environment in a specific community (ABAG, 2017).

Regulatory Background

Noise levels related to construction and operation activities are addressed in local General Plan policies and local noise ordinance standards. The General Plans and noise ordinances generally establish allowable noise limits within different land uses including residential areas, other sensitive use areas (e.g., schools, churches, hospitals, and libraries), commercial areas, and industrial areas.

Significance Criteria

The proposed project impacts on noise will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise ordinance is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the closest off-site receptor.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion of Impacts

XII a and b. The proposed amendments to Rules 2-1 and 2-5 would not require new facilities but may require existing sources to implement air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures are not expected to require extensive construction or demolition activities or grading to install the control equipment or implement the emission reduction measures. Diesel particulate filters could be installed on existing equipment with no construction activities. Relocating emission sources or stacks is also expected to require minimal activities as they would be relocated within the existing site. A reduction in operating hours or throughput would require no construction activities. The equipment would be installed at existing facilities that have been previously graded.

The locations of specific projects and the type of equipment that would be used is currently unknown. Noise from construction activities can vary greatly from 65 to 80 dBA or more, depending on the type of construction equipment (U.S. FTA, 2018). Noise from construction activities would diminish rapidly with distance from a constructive site, generally at a rate of six decibels per doubling of distance. For example, a noise level of 86 decibels measured at 50 feet from the noise source would decrease to 80 decibels at 100 feet, 74 decibels at 200 feet, 68 decibels at 400 feet, and 62 decibels at 800 feet. Most local cities and counties limit construction activities to daytime houses (e.g., between 7:00 am and 7:00 pm Monday through Friday). Compliance with local noise requirements would limit noise activities to daytime hours during weekdays and avoid construction during the more sensitive nighttime hours. Further construction activities are expected to be limited to industrial/commercial areas and would be temporary. Therefore, noise impacts associated with construction activities are expected to be less than significant.

The existing noise environment at the affected facilities is typically dominated by noise from existing equipment onsite, vehicular traffic around the facilities, and trucks entering and exiting facility premises. No new major industrial equipment is expected to be required to be installed due to the proposed rule amendments. Control measures such as, diesel particulate filters, cleaner equipment (e.g., Tier 4 engines), reduced operating times/througput, or relocated emission sources or stacks are not major sources of noise and would result in little to no noise impacts. Any noise producing equipment must comply with local noise ordnances and applicable OSHA and Cal/OSHA noise requirements. Compliance with these noise requirements would apply to affected facilities and would be expected to limit noise activities to acceptable levels. Therefore, noise impacts associated with operational activities are expected to be less than significant.

The proposed rule amendments are not expected to generate or expose people to excessive ground borne vibration or ground borne noise. No large construction equipment that would generate substantial noise or vibration (e.g., backhoes, graders, jackhammers, etc.), no new industrial equipment that would generate vibration, and no increase in traffic is expected to be generated.

XII c. It is not known if the existing commercial or industrial sites affected by the proposed rule amendments are located within existing airport land use plans. The addition of new or modification of existing facilities would not expose people residing or working in the project area

to excessive noise levels associated with airports, as this type of equipment is not typically noise generating equipment. The proposed amendments to Rules 2-1 and 2-5 would not locate residents or commercial buildings or other sensitive noise sources closer to airport operations.

Conclusion

Based upon these considerations, no significant adverse noise impacts are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

		Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV.	**POPULATION / HOUSING.** Would the project:				
a)	Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	☐	☐	☐	☑
b)	Displace a substantial number of existing people or housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Environmental Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses. The amendments to Rules 2-1 and 2-5 would apply to facilities which are typically located within industrial or commercial areas.

Population in the Bay Area in 2015 was about 7.6 million people which is about 20 percent of California's population. The population of the Bay Area is expected to grow to about 9.6 million people by 2040. Approximately 4 million people in the Bay Area were employed in 2015, and that number is expected to grow to 4.7 million jobs by 2040. There were approximately 2.8 million households in the Bay Area in 2015, and the number of households is expected to increase to 3.4 million by 2040 (ABAG, 2017).

Regulatory Background

Population and housing growth and resources are generally protected and regulated by the City and/or County General Plans through land use and zoning requirements.

Significance Criteria

The proposed project impacts on population and housing will be considered significant if:

- The demand for temporary or permanent housing exceeds the existing supply.

- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.
- The project displaces substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in a City or County Housing Element.

Discussion of Impacts

XIII a). The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to implement air pollution control measures.

It is expected that the existing labor pool would accommodate the labor requirements for the any construction activities (should they be required), as the existing labor pool in the Bay Area is approximately 7.6 million people. In addition, it is not expected that the affected facilities would need to hire additional permanent personnel to implement the proposed rule amendments. As such, implementing the proposed amendments to Rules 2-1 and 2-5 are not expected to induce substantial population growth.

XIII b). As discussed previously, the proposed amendments to Rules 2-1 and 2-5 are expected to occur at existing industrial/commercial facilities. The implementation of the proposed rule amendments are not expected to result in the creation of any industry/business that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of people or housing elsewhere in the Bay Area. Based upon these considerations, significant population and housing impacts are not expected from the implementation of the proposed rule amendments.

Conclusion

Based upon these considerations, no significant adverse impacts to population and housing are expected due to the implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The jurisdiction of the Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties.

Public services are provided by a wide variety of local agencies. Fire protection services are managed at the local level, typically by municipalities, counties, fire protection districts, or volunteer fire companies. California Government Code §38611 states that any city organized under general law must establish a fire department unless it is included within the boundaries of an established fire protection district. State and federal lands are generally served by State and federal fire agencies, e.g., CALFIRE and National Park Service. In some cases, businesses and native tribes manage their own fire departments. Each fire protection agency is responsible for serving its own prescribed area, but mutual aid agreements are in wide use across the region such that agencies can rely on assistance from neighboring agencies in the case of overwhelming demand (ABAG, 2017).

Police services are provided on the State, county, and local levels. Police services provide law enforcement in crime prevention, traffic and congestion control, safety management, emergency response, and homeland security. The California Highway Patrol (CHP) is responsible for police protection along the interstate highway systems and provides services for traffic management,

emergency response, and protection of the highway system. Each county in the Bay Area has its own sheriff's department responsible for police protection in unincorporated areas of each county. Each incorporated city and town has a police department responsible for police protection within its own jurisdiction. Unincorporated areas and individual cities and towns also may contract with county sheriff departments for police services instead of providing their own (ABAG, 2017).

Although the California public school system is under the policy direction of the Legislature, the California Department of Education relies on local control for the management of school districts. School district governing boards and district administrators allocate resources among the schools of the district and set education priorities for their schools. Each jurisdiction in the Bay Area provides residents with local public education facilities and services, including elementary, middle, secondary, and post-secondary schools, as well as special and adult education. As of 2015-2016 school year, there were 2,018 public and charter schools in the Bay Area with 1,019,853 enrolled students and 51,702 teachers (ABAG, 2017).

Public facilities within the Air District are managed by different county, city, and special-use districts.

Regulatory Background

City and/or County General Plans usually contain goals and policies to assure adequate public services are maintained within the local jurisdiction.

Significance Criteria

The proposed project impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

Discussion of Impacts

XIV a. The amendments to Rules 2-1 and 2-5 are designed to make technical and administrative changes to make these rules more health protective. The proposed amendments are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to implement air pollution control measures. No additional fire or police protection services are expected to be required due to the proposed rule amendments as they would apply to existing emission sources.

As noted in the "Population and Housing" discussion above, the proposed rule amendments are not expected to induce population growth because the existing local labor pool (e.g., workforce) is expected to be sufficient to accommodate the very minor construction activities that could be required due to the proposed rule amendments. No increase in permanent workers is expected to be required to operate the equipment or control measures associated with implementation of

proposed amendments to Rules 2-1 and 2-5. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

Implementation of the proposed amendments to Rules 2-1 and 2-5 would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. The facilities affected by the proposed rule amendments are existing facilities for which public services are already required and no increase in the need for such services is expected. There will be no increase in population as a result of the adoption of the proposed rule amendments, therefore, no need for physically altered government facilities.

Conclusion

Based upon these considerations, no significant adverse impacts to public services are expected due to the implementation of the proposed amendments to Rules 2-1 and 2-5.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☑

Environmental Setting

The jurisdiction of the Air District covers all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and potions of western Solano and southern Sonoma Counties. Because the area of coverage is vast (approximately 5,600 square miles), land uses vary greatly and include commercial, industrial, residential, and agricultural uses.

The Bay Area contains over one million acres of parks and open space areas. Approximately 265,000 acres of new parkland were added to the region's open space inventory between 2002 and 2013, representing a 26 percent increase. Additionally, approximately 200,000 acres of privately owned land are held in permanent reserve as of 2013. While access by the general public to these reserve areas is restricted, they are important for the preservation of wildlife habitats and the protection of the environment (ABAG, 2017).

Regulatory Background

Recreational areas are generally protected and regulated by the City and/or County General Plans at the local level through land use and zoning requirements. Some parks and recreation areas are designated and protected by state and federal regulations.

Significance Criteria

The proposed project impacts on recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.

- The project adversely affects existing recreational opportunities.

Discussion of Impacts

XVI a-b. As discussed under "Land Use" (Section XI), there are no provisions in the proposed amendments to Rules 2-1 and 2-5 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements will be altered by the proposed rule amendments. Construction activities are expected to be minimal and no increase in permanent workers is expected. All construction activities are expected to take place within existing industrial/commercial areas that have been previously graded and developed. Thus, there would be no impacts on recreation facilities associated with implementation of the proposed rule amendments.

Further, the proposed amendments to Rules 2-1 and 2-5 would not increase or redistribute population and, therefore, would not increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or the expansion of existing recreational facilities. Therefore, adoption of the proposed amendments to Rules 2-1 and 2-5 are expected to have any significant adverse impacts on recreation.

Conclusion

Based upon these considerations, no significant adverse recreation impacts are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The jurisdiction of the Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles). Transportation systems located within the Bay Area include railroads, airports, waterways, and highways. The Port of Oakland and three international airports in the area serve as hubs for commerce and transportation. The transportation infrastructure for vehicles and trucks in the Bay Area ranges from single lane roadways to multilane interstate highways. The Bay Area currently contains over 1,300 directional miles of limited-access highways, which include both interstates and state highways. In addition, the Bay Area has over 33,000 directional miles of arterials and local streets, providing more localized access to individual communities. Together, these roadway facilities accommodate nearly 21 million vehicle trips a day. There are over 11,500 transit route miles of service including heavy rail (BART), light rail (Muni Metro and VTA Light Rail), commuter rail (Caltrain and Alameda Commuter Express or ACE), diesel and electric buses, cable cars, and ferries. The Bay Area also has an extensive local system of bicycle routes and pedestrian paths and sidewalks. At a regional level, the share of workers driving alone was about 68 percent in 2010. The portion of commuters that carpool was about 10 percent in 2015, while an additional 12 percent utilize public transit. About 2 percent of commuters walked to work in 2015. In addition, other modes of travel (bicycle, motorcycle, etc.), account for 5 percent of commuters in 2015 (ABAG, 2017). Cars, buses, and commercial vehicles travel about 158 million miles a day (2015) on the Bay Area freeways and local roads. Transit serves about 2.3 million riders on the average weekday (ABAG, 2017).

The region is served by numerous interstate and U.S. freeways. On the west side of San Francisco Bay, Interstate 280 and U.S. 101 run north-south. U.S. 101 continues north of San Francisco into Marin County. Interstates 880 and 660 run north-south on the east side of the Bay. Interstate 80 starts in San Francisco, crosses the Bay Bridge, and runs northeast toward Sacramento. Interstate 80 is a six-lane north-south freeway which connects Contra Costa County to Solano County via the Carquinez Bridge. State Routes 29 and 84, both highways that allow at-grade crossings in certain parts of the region, become freeways that run east-west, and cross the Bay. Interstate 580 starts in San Rafael, crosses the Richmond-San Rafael Bridge, joins with Interstate 80, runs through Oakland, and then runs eastward toward Livermore. From the Benicia-Martinez Bridge, Interstate 680 extends north to Interstate 80 in Cordelia. Interstate 780 is a four lane, east-west freeway extending from the Benicia-Martinez Bridge west to I-80 in Vallejo.

Regulatory Background

Transportation planning is usually conducted at the state and county level. California Department of Transportation (Caltrans) has jurisdiction over and constructs and maintains state highways. Caltrans District 4 serves Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, San Francisco, Santa Clara, Solano, and Sonoma counties.

The Metropolitan Transportation Commission (MTC) is the state designated metropolitan planning organization for the nine-county San Francisco Bay Area; it has authority for regional planning, distributing and administering federal and state funds for all modes of transportation, and assuring that projects are consistent with the Regional Transportation Plan.

MTC updated its Regional Transportation Plan in 2017, referred to as the Plan Bay Area 2040, which forecasts transportation needs through 2040, while providing more housing and transportation choices and reducing pollution caused by transportation.

Most local counties maintain a transportation agency that has the duties of transportation planning and administration of improvement projects within the county and implements the Transportation Improvement and Growth Management Program, and the congestion management plans (CMPs). The CMP identifies a system of state highways and regionally significant principal arterials and specifies level of service standards for those roadways.

Significance Criteria

The proposed project impacts on transportation will be considered significant if:

- The project would conflict with a program, plan, ordinance, or policy addressing the circulation system.
- The project conflicts with or is inconsistent with CEQA Guidelines § 15064.3 subdivision(b).
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.

- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased due to geometric design features or incompatible uses.
- The project would result in inadequate emergency access.

Discussion of Impacts

XVII. a and b) The proposed amendments to Rules 2-1 and 2-5 are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to implement air pollution control measures. Additional trucks may be required to deliver new air pollution control equipment as part of the construction phase. This would be a one-time delivery of equipment with no increase in peak hour truck traffic. Up to 20 temporary construction workers may be required to install new air pollution control equipment, however, construction activities are not expected to be extensive or require a substantial increase in workers or related traffic. Further, construction workers would be temporary and the traffic would cease once construction activities are complete.

Following construction activities, the control strategies would not be expected to generate a substantial increase in traffic, either workers or trucks. As discussed in XIV - Population and Housing, it is not expected that the affected facilities would need to hire additional personnel to operate new equipment at existing facilities, so no increase in permanent worker or truck traffic would be expected. The proposed amendments to Rules 2-1 and 2-5 would not result in a conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, the proposed rule amendments are not expected to conflict or be inconsistent with CEQA Guidelines § 15064.3 subdivision(b), as no increase in traffic is expected to occur, following the completion of construction activities.

XVII. c and d) The proposed rule amendments would not increase traffic hazards or create incompatible uses. The proposed project does not involve construction of any roadways or other transportation design features, so no changes to current roadway designs that would increase traffic hazards are expected. Since changes to the roadway system are not expected, no impacts to emergency access would be expected. Emergency access at facilities affected by the proposed rule amendments is not expected to be impacted, as no modifications that effect traffic or access are expected to be required. Based on the above, the proposed amendments to Rules 2-1 and 2-5 are not expected to increase vehicle trips or to alter the existing long-term circulation patterns, thus creating traffic hazards or impacting emergency access.

Conclusion

Based upon these considerations, no significant adverse impacts to transportation are expected due to implementation of proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

The jurisdiction of the Air District covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties and portions of southwestern Solano and southern Sonoma Counties. The area of coverage is vast (about 5,600 square miles), so that land uses vary greatly and include commercial, industrial, residential, agricultural, and open space uses.

The Carquinez Strait represents the entry point for the Sacramento and San Joaquin Rivers into the San Francisco Bay. This locality lies within the San Francisco Bay and the west end of the Central Valley archaeological regions, both of which contain a rich array of prehistoric and historical cultural resources. The areas surrounding the Carquinez Strait and Suisun Bay have been occupied for centuries given their abundant natural resources and moderate climate. The

arrival of Native Americans into the Bay Area is associated with documented cultural resources from about 5,500 years ago (ABAG, 2013).

Six different groups of Native American population, identified by their language, lived within the Bay Area, including Costanoan, Eastern Miwok, Patwin, Coast Miwok, Pomo, and Wappo. Native villages and campsites were inhabited on a temporary basis and are found in several ecological niches due to the seasonal nature of their subsistence base. Remains of these early populations indicate that main villages, seldom more than 1,000 residents, were usually established along water courses and drainages. By the late 1760s, about 300,000 Native Americans lived in California (ABAG, 2013).

Regulatory Background

The State CEQA Guidelines were amended in July 2015 to include evaluation of impacts on tribal cultural resources. Tribal cultural resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe (Public Resources Code 21074).

Significance Criteria

The proposed project impacts to tribal resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.

Discussion of Impacts

The State CEQA Guidelines were amended in July 2015 to include evaluation of impacts on tribal cultural resources, which include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. Assembly Bill (AB) 52 specifies that a project that may cause a substantial adverse change to a tribal cultural resource may result in a significant effect on the environment. AB52 requires tribes interested in development projects within a traditionally and culturally affiliated geographic area to notify a lead agency of such interest and to request notification of future projects subject to CEQA prior to determining if a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The lead agency is then required to notify the tribe within 14 days of deeming a development application subject to CEQA complete to notify the requesting tribe as an invitation to consult on the project. AB52 identifies examples of mitigation measures that will avoid or minimize impacts to a tribal cultural resources and applies to projects that have a notice of preparation or a notice of intent to adopt a negative declaration/mitigated negative declaration circulated on or after July 1, 2015.

XVIII a). As discussed under Cultural Resources (Section V), the Bay Area has locations that were historically used by Native Americans. Thus there is the potential for the presence of unrecorded tribal cultural resources to be buried throughout the District.

The proposed amendments to Rules 2-1 and 2-5 are expected to result in additional control measures at stationary sources of emissions, particularly diesel engines and gasoline stations, within or adjacent to overburdened communities. The modified rules would not require new facilities but may require sources to implement air pollution control measures at existing facilities. Any construction activities would take place at existing facilities that have been previously graded and developed and no major construction activities are expected. Because construction will be limited to existing industrial/commercial facilities that have been graded and developed, the proposed rule amendments are not expected to require physical changes to a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, the proposed rule amendments are not expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. In areas where there are sensitive resources, pre-construction surveys and qualified archaeological and tribal monitors will be present during grading operations (if needed) to identify historic resources. These standard requirements, along with the fact that the proposed rule amendments are not expected to require extensive construction or grading activities, are expected to limit impacts on historical and tribal resources as defined in Public Resources Section 5020.1(k), or 5024.1. Therefore, no significant impacts to tribal resources are anticipated to occur as a result of the proposed amendments to Rules 2-1 and 2-5.

Conclusion

Based upon these considerations, no significant adverse impacts to tribal cultural resources are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

Given the large area covered by the Air District, public utilities are provided by a wide variety of local agencies. Most public wastewater treatment plants and industrial facilities have wastewater and storm water treatment facilities and discharge treated wastewater under the requirements of National Pollutant Discharge Elimination System (NPDES) permits. Water is supplied to affected facilities by several water purveyors in the Bay Area. Solid waste is handled through a variety of municipalities, through recycling activities, and at disposal sites.

There are no hazardous waste disposal sites within the jurisdiction of the Air District. Hazardous waste generated at facilities, which is not recycled off-site, is required to be disposed of at a licensed hazardous waste disposal facility. Two such facilities are the Chemical Waste Management Inc. (CWMI) Kettleman Hills facility in King's County, and the Safety-Kleen facility in Buttonwillow (Kern County). Hazardous waste can also be transported to permitted facilities outside of California.

Regulatory Background

City and/or County General Plans usually contain goals and policies to assure adequate utilities and service systems are maintained within the local jurisdiction.

Significance Criteria

The proposed project impacts on utilities/service systems will be considered significant if:

- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- An increase in demand for utilities impacts the current capacities of the electric utilities.
- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use a substantial amount of potable water.
- The project increases demand for water by more than 263,000 gallons per day.
- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion of Impacts

XIX a and c). The potential water use and wastewater impacts associated with implementation of the proposed rule amendments were discussed under Hydrology and Water Quality (see Section X). The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures would not require the use of any additional water or generate wastewater. The installation of water spray/mist systems could be used at larger facilities (e.g., manufacturing facilities, waste transfer facilities, concrete manufacturing facilities, etc.) to minimize particulate emissions. The water mist systems only use small amounts of water to minimize particulate emissions and do not generate wastewater. Therefore, the proposed rule amendments would not be expected to result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage facilities.

The potential increase in energy consumption associated with the proposed rule amendments was discussed under Energy (see Section VI). The amendments to Rules 2-1 and 2-5 are not expected to require new equipment but may require air pollution control measures. The types of measures that may be required are not expected to require an increase in electricity or natural gas. For example, Tier 4 diesel engines may be required instead of Tier 3 diesel engines. A Tier 4 engine

would not use additional energy (diesel fuel) than a Tier 3 engine. Relocation of equipment would not require additional energy. A reduction in operating hours for a gas station, for example, would likely use less energy than full operating hours. The types of equipment that are expected to be predominately required under the proposed rule amendments are not expected to require any substantial increase in electricity, natural gas, or telecommunication equipment or require the construction of new facilities.

Should larger facilities be impacted by amendments to Rules 2-1 and 2-5, other types of air pollution control measures could be required, e.g., baghouses and spray mist systems for particulate control. Baghouses require the use of electricity and could require an estimated 0.055 to 0.060 gigawatt-hours per year or less and 0.0001 percent of the electricity use in the Bay Area. None of the control measures are expected to require additional natural gas. The facilities potentially affected by the proposed rule amendments are expected to be commercial and industrial facilities that already have electricity services, which are expected to be sufficient to handle the potential small increase in electricity

XIX b). The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to implement air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. These types of measures would not require the use of any additional water.

A mist system is estimated to use an average of 6,300 gallons per day (SCAQMD, 2011), for a total increase of 63,000 gallons per day. The water use would be considered significant if it exceeded the CEQA threshold of 263,000 gallons or more of potable water per day. The proposed rule amendments would only be expected to require 2-3 water systems at most (126,000 to 189,000 gallons per day), so that the water use associated with the proposed amendments to Rules 2-1 and 2-5 will not significantly impact water demand. Further, modifications would be expected to occur at existing commercial/industrial facilities which are already supplied with water. Therefore, the proposed rule amendments are not expected to result in an increase in water demand, or have a negative impact on water supplies.

XIX d and e). Implementation of air emission control measures as a result of proposed amendments to Rules 2-1 and 2-5 will not significantly increase solid or hazardous wastes generated by the affected facilities. The types of measures that may be required are not expected to generate additional wastes. For example, Tier 4 diesel engines may be required instead of Tier 3 diesel engines. A Tier 4 engine would not generate additional waste than a Tier 3 engine. Relocation of equipment, an increase in stack height, or a reduction in operating hours for a gas station, for example, would not generate more waste. Therefore, no significant impacts to hazardous or solid waste disposal facilities are expected due to the proposed rule amendments rule. Facilities are expected to continue to comply with all applicable federal, state, and local statutes and regulations related to solid and hazardous wastes.

Conclusion

Based upon these considerations, no significant adverse impacts to utilities and service systems are expected due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Environmental Setting

Wildfires are a natural part of the California landscape, and wildfire threats have worsened over recent years. Climate change is considered a key driver of this trend, as climate change is expected to exacerbate wildfire risk through hotter temperatures, greater moisture deficits even in wetter years, and greater likelihood of prolonged drought and possibly associated beetle-caused tree mortality over the coming decades. Further, decades of fire suppression have disrupted natural fire cycles and added to the problem.

The California Department of Forestry and Fire Protection (CalFire) maps areas identify significant fire hazard based on fuels, terrain, weather, and other relevant factors. These zones, referred to as a Fire Hazard Severity Zones, then determine the requirements for special building codes designed to reduce the ignition potential of buildings.

Regulatory Background

The State of California has passed numerous laws to address wildlife and structural fires. Wildfire-prevention laws regulate activities in areas deemed by the state to be hazardous fire areas; the maintenance of buildings and other structures in areas covered by forest, brush, or other flammable materials; and the setting and burning of fires on open land.

Title 24 of the California Building Code sets forth the fire, life-safety and other building-related regulations applicable to any structure fit for occupancy statewide for which a building permit is sought. Title 24 Part 9 is the California Fire Codes that addresses automatic sprinkler systems, fire-alarm systems, access by fire-fighting equipment, fire hydrants, explosion-hazards safety, hazardous materials storage and use, protection for first responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings.

Executive Order N-05-19 was issued in 2019 to address the increasing threat of wildfires due to climate change. The executive order was issued to earmark funding from the Greenhouse Gas Reduction Fund to active forestland management to reduce wildfires in the state. Governor Newsom included in the order a directive to CalFIRE to provide a written report with recommendations for the most impactful changes necessary to prevent and mitigate wildfires.

Local cities and counties generally include safety elements in their General Plans that establishes goals and policies to assure adequate fire services are maintained within the local jurisdiction. Cities and counties also may establish building and fire prevention codes which place regulations on the separation of buildings, ventilation criteria, roof materials, landscaping, building access, and the installation of automatic fire-extinguishing systems in public buildings.

Significance Criteria

The impacts to wildfires will be considered significant if:

- The project results in new structures located within or adjacent to lands classified as very high fire hazard severity zones
- The project adversely effects emergency response or emergency evacuation plans.

Discussion of Impacts

XX. a), b), c), and d) No Impact. The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to implement air pollution control measures (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. The implementation of additional air pollution control measures would occur in existing industrial/commercial areas and adjacent to existing facilities. This equipment would be compatible with the existing industrial/commercial character of the area and is not expected to occur in CalFIRE wildfire hazard zones. New structures would need to be compliant with the local building and fire codes that take wildfire hazard zones and fire protection into

consideration. The proposed amendments to Rules 2-1 and 2-5are not expected to expose people or structures to wild fires, would not impair and adopted emergency response plan or emergency evacuation plan for wild fires, would not exposure project occupants to pollutants from a wildfire or the uncontrolled spread of a wildfire and would not exposure people or structures to flooding or landslides as a result of post-fire slope or drainage changes. Therefore, no potential significant adverse impacts resulting from wildfires are expected from the proposed rule amendments.

Conclusion

Based upon the above considerations, no significant impacts due to wildfires are expected to occur due to implementation of the proposed amendments to Rules 2-1 and 2-5.

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

Discussion of Impacts

XXI a. The amendments to Rules 2-1 and 2-5 would not require new facilities but may require sources to install air pollution control equipment (e.g., diesel particulate filters), use cleaner equipment (e.g., Tier 4 engines), reduce operating times, or relocate emission sources or stacks. The implementation of additional air pollution control measures would be expected to occur in existing developed industrial and commercial areas where native biological resources have been removed or are non-existent. In additional, cultural or tribal resources would also not be expected to occur. In areas where there are sensitive resources, pre-construction surveys and qualified archaeological and tribal monitors will be present during grading operations (if needed) to identify historic resources.

Therefore, the proposed rule amendments do not have the potential to 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, 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, as discussed in the previous sections of the CEQA checklist. As discussed in Section IV - Biological Resources, Section V - Cultural Resources, and Section XVIII – Tribal Cultural Resources, no significant adverse impacts are expected to biological, cultural or tribal cultural resources.

XXI b-c. The amendments to Rules 2-1 and 2-5 are not expected to result in any significant environmental impacts. Air quality impacts to implement control measures are expected to be largely beneficial and any minor construction activities are expected to be below applicable significance thresholds. Therefore, the implementation of proposed rule amendments will not result in a cumulatively considerable contribution to the net increase of any criteria pollutant for which the project region is a non-attainment area for an applicable federal or state ambient air quality standard. Further, the proposed rule amendments are expected to minimize emissions of toxic air contaminants from new and modified emissions sources in communities that are overburdened by pollution, resulting in a reduction in exposures to TACs and beneficial health impacts. Additional emission reductions are unknown and, thus, are not quantified in this analysis. Further, the proposed amendments to Rules 2-1 and 2-5 would implement portions of control measure SS21 in the 2017 Clean Air Plan to help achieve the Plan's goals of reducing TAC emissions.

As discussed in the previous checklist discussions, the proposed amendments to Rules 2-1 and 2-5 are not expected to exceed any of the applicable significance thresholds, which also serve as the cumulative significance thresholds. Therefore, the proposed project impacts are not considered to be cumulatively considerable (CEQA Guidelines §15064 (h)(1)) and are not expected to generate significant adverse cumulative impacts. The proposed project does not have adverse environmental impacts that are limited individually, but cumulatively considerable when considered in conjunction with other regulatory control projects. The proposed amendments to Rules 2-1 and 2-5 are not expected to have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. No significant adverse environmental impacts are expected.

CHAPTER 4

REFERENCES

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CHAPTER 4

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APPENDIX A

Emissions Calculations

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Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Small Project Construction Emission Summary

Emissions from Equipment (lb)	Daily Emissions (1)	Annual Emissions (2)
ROG	0.43	5.99
CO	3.00	41.94
NOx	4.12	57.74
SOx	0.01	0.08
PM10	0.21	2.92
PM2.5	0.21	2.89
CO_2	558.91	7824.68

Emission from Trips - Onsite/Offsite	Daily Emissions (1)	Annual Emissions (2)
ROG	0.02	0.27
CO	0.36	5.07
NOx	0.71	9.99
SOx	0.00	0.06
PM10	0.35	4.91
Exhuast PM	0.01	0.13
Fugitive PM	0.34	4.78
PM2.5	0.09	1.33
Exhuast PM	0.01	0.12
Fugitive PM	0.09	1.20
CO_2	499.12	6987.71

Total Emissions	Thresholds	Daily Emissions (1)	Annual Emissions (2)
ROG	54	0.45	6.26
CO	NA	3.36	47.00
NOx	54	4.84	67.73
SOx	NA	0.01	0.14
PM10	82	0.56	7.83
PM2.5	54	0.30	4.22
CO_2 (MT)	NA	0.48	6.72

(1) Based on 1 project per day.

(2) Based on 14 projects per year.

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Large Project Construction Emission Summary

Emissions from Equipment (lb)	Daily Emissions [1]	Annual Emissions [2]
ROG	0.90	18.09
CO	6.02	120.33
NOx	8.24	164.76
SOx	0.01	0.23
PM10	0.40	7.93
PM2.5	0.39	7.85
CO_2	1100.15	22003.01

Emission from Trips - Onsite/Offsite	Daily Emissions [1]	Annual Emissions [2]
ROG	0.03	0.54
CO	0.84	16.72
NOx	0.75	15.09
SOx	0.01	0.12
PM10	0.48	9.61
Exhuast PM	0.01	0.20
Fugitive PM	0.47	9.41
PM2.5	0.13	2.55
Exhuast PM	0.01	0.19
Fugitive PM	0.12	2.36
CO_2	660.80	13215.99

Total Emissions	Thresholds	Daily Emissions [1]	Annual Emissions [2]
ROG	54	0.93	18.63
CO	NA	6.85	137.05
NOx	54	8.99	179.85
SOx	NA	0.02	0.35
PM10	82	0.88	17.54
PM2.5	54	0.52	10.40
CO_2 (MT)	NA	0.80	15.98

(1) Based on 1 project per day.

(2) Based on 20 days per year.

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Construction Equipment Emission Rates

Equipment Type	OFFROAD2017 Category	Hp	2021 Emission Factors lb/hr						
			ROG	CO	NOx	SOx	PM10	PM2.5	CO2
Aerial Lift	OFF - Industrial - Aerial Lifts	25	0.01010	0.0483	0.07653	0.00014	0.00304	0.00280	10.0781
Crane	ConstMin - Cranes	Aggregated	0.05434	0.3695	0.59726	0.00072	0.02736	0.02517	77.5083
Fork Lift	Industrial - Forklifts	Aggregated	0.01624	0.1414	0.14039	0.00019	0.00935	0.00860	21.031
Welder	OFF - Light Commercial - Welders	Aggregated	0.02225	0.1446	0.13907	0.00025	0.00675	0.00621	18.8234

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Construction Equipment Emissions

Equipment	Hours (hr/day)	Small Projects Equipment Count	Large Projects Equipment Count
Aerial Lift	8	1	2
Crane	4	1	2
Fork Lift	8	1	1
Welder	8		1

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Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
ROG	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.010	0.08	0.16
Crane	0.054	0.22	0.43
Fork Lift	0.016	0.13	0.13
Welder	0.022	0.00	0.18
Total		0.43	0.90

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	Emission Rate (lb/hr)	Small Project	Large Project
CO	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.048	0.39	0.77
Crane	0.370	1.48	2.96
Fork Lift	0.141	1.13	1.13
Welder	0.145	0.00	1.16
Total		3.00	6.02

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Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
NOX	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.077	0.61	1.22
Crane	0.597	2.39	4.78
Fork Lift	0.140	1.12	1.12
Welder	0.139	0.00	1.11
Total		4.12	8.24

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Bay Area Air Quality Management District
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	Emission Rate (lb/hr)	Small Project	Large Project
SOx	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.000	0.00	0.00
Crane	0.001	0.00	0.01
Fork Lift	0.000	0.00	0.00
Welder	0.000	0.00	0.00
Total		0.01	0.01

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Bay Area Air Quality Management District
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Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
PM10	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.003	0.02	0.05
Crane	0.027	0.11	0.22
Fork Lift	0.009	0.07	0.07
Welder	0.007	0.00	0.05
Total		0.21	0.40

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Bay Area Air Quality Management District
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Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
PM2.5	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	0.003	0.02	0.04
Crane	0.025	0.10	0.20
Fork Lift	0.009	0.07	0.07
Welder	0.006	0.00	0.05
Total		0.19	0.36

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Bay Area Air Quality Management District
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Construction Equipment Emissions

	Emission Rate (lb/hr)	Small Project	Large Project
CO2	**2021**	**(lb/day)**	**(lb/day)**
Aerial Lift	10.078	80.62	161.25
Crane	77.508	310.03	620.07
Fork Lift	21.031	168.25	168.25
Welder	18.823	0.00	150.59
Total		558.91	1100.15

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Onsite Construction Vehicle Trip Emissions

		Month (Vehicles per	
Vehicle	**Miles per Day**	**1**	**2**
Cars	0.1	5	20
Pickup Trucks	0.1	0	0
Total Light Vehicle Miles		0.5	2
Water Truck	0.1	0	0
Delivery Truck	0.1	1	2
1 Ton Truck	0.1		
Misc. MD Truck	0.1	1	1
Total Medium Truck Miles		0.2	0.3
Dump Truck	0.1		
Concrete Truck	0.1		
Boom Truck	0.1	1	1
Misc. HD Truck	0.1	1	1
Total Heavy Truck Miles		0.2	0.2

	Emission Rate (lb/mi)(1)	**Month (Vehicles per day)**	
ROG	**Month**	**1**	**2**
Light Duty	0.0000139	0.00	0.00
Medium Duty	0.0000324	0.00	0.00
Heavy Duty	0.0001081	0.00	0.00
Heavy Duty Idling	0.0007736	0.00	0.00
Total		0.00	0.00

CO	**Month**	**1**	**2**
Light Duty	0.0009095	0.00	0.00
Medium Duty	0.0014309	0.00	0.00
Heavy Duty	0.0004314	0.00	0.00
Heavy Duty Idling	0.0102637	0.02	0.02
Total		0.02	0.02

NOx	**Month**	**1**	**2**
Light Duty	0.0000680	0.00	0.00
Medium Duty	0.0002139	0.00	0.00
Heavy Duty	0.0063879	0.00	0.00
Heavy Duty Idling	0.0104926	0.02	0.02
Total		0.02	0.02

SOx	**Month**	**1**	**2**
Light Duty	0.0000030	0.00	0.00
Medium Duty	0.0000052	0.00	0.00
Heavy Duty	0.0000354	0.00	0.00
Heavy Duty Idling	0.0000183	0.00	0.00
Total		0.00	0.00

PM10	**Month**	**1**	**2**
Light Duty Exhaust	0.0000015	0.00	0.00
Medium Duty Exhaust	0.0000024	0.00	0.00
Heavy Duty Idle Exhaust	0.0000099	0.00	0.00
Heavy Duty Exhaust	0.0000863	0.00	0.00
Total Exhaust PM		0.00	0.00
Light Duty Tire and Brake Wear	0.0000155	0.00	0.00
Medium Duty Tire and Brake Wear	0.0000218	0.00	0.00
Heavy Duty Tire and Brake Wear	0.0002575	0.00	0.00
Light Duty Fugitive Road Dust(2)	0.000221	0.00	0.00
Medium Duty Fugitive Road Dust(2)	0.000467	0.00	0.00
Heavy Duty Fugitive Road Dust(2)	0.002314	0.00	0.00
Total Fugitive PM		0.00	0.00
Total		0.00	0.00

PM2.5	**Month**	**1**	**2**
Light Duty Exhaust	0.0000013	0.00	0.00
Medium Duty Exhaust	0.0000023	0.00	0.00
Heavy Duty Idle Exhaust	0.0000095	0.00	0.00
Heavy Duty Exhaust	0.0000825	0.00	0.00
Total Exhaust PM		0.00	0.00
Light Duty Tire and Brake Wear	0.0000046	0.00	0.00
Medium Duty Tire and Brake Wear	0.0000067	0.00	0.00
Heavy Duty Tire and Brake Wear	0.0000824	0.00	0.00
Light Duty Fugitive Road Dust(2)	0.000054	0.00	0.00
Medium Duty Fugitive Road Dust(2)	0.000115	0.00	0.00
Heavy Duty Fugitive Road Dust(2)	0.000568	0.00	0.00
Total Fugitive PM		0.00	0.00
Total		0.00	0.00

CO2e	**Month**	**1**	**2**
Light Duty	0.305	0.15	0.61
Medium Duty	0.529	0.11	0.16
Heavy Duty	3.922	0.78	0.78
Heavy Duty Idling	2.029	4.06	4.06
Total		5.10	5.61

(1) Emfac2021 emission factors for theBAAQMD.

(2) Emission Calculations for travel on paved roads from EPA AP-42 Section 13.2.1, January 2011
E = k(sL)0.91 x (W)1.02
Where: k = 0.0022 lb/VMT for PM10 and k=0.00054 for PM2.5, sL = road silt loading (gms/m2) (0.03 for major/collector roads), W = weight of vehicles (2.5 tons for light; 5.5 for medium trucks, and 24 for heavy trucks)

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Offsite Construction Vehicle Trip Emissions

		Month (Vehicles per	
Vehicle	**Miles per Day**	**1**	**2**
Cars	29.4	5	20
Pickup Trucks	29.4	0	0
Total Light Vehicle Miles		147	588
Water Truck	50	0	0
Delivery Truck	50	1	2
1 Ton Truck	50		
Misc. MD Truck	50	1	1
Total Medium Truck Miles		100	150
Dump Truck	150		
Concrete Truck	100		
Boom Truck	50	1	1
Misc. HD Truck	50	1	1
Total Heavy Truck Miles		100	100

	Emission Rate (lb/mi)(1)	**Month (Vehicles per day)**	
ROG	**Month**	**1**	**2**
Light Duty	0.0000139	0.00	0.01
Medium Duty	0.0000324	0.00	0.00
Heavy Duty	0.0001081	0.01	0.01
Heavy Duty Idling	0.0007736	0.00	0.00
Total		0.02	0.03

CO	**Month**	**1**	**2**
Light Duty	0.0009095	0.13	0.53
Medium Duty	0.0014309	0.14	0.21
Heavy Duty	0.0004314	0.04	0.04
Heavy Duty Idling	0.0102637	0.02	0.02
Total		0.34	0.81

NOx	**Month**	**1**	**2**
Light Duty	0.0000680	0.01	0.04
Medium Duty	0.0002139	0.02	0.03
Heavy Duty	0.0063879	0.64	0.64
Heavy Duty Idling	0.0104926	0.02	0.02
Total		0.69	0.73

SOx	**Month**	**1**	**2**
Light Duty	0.0000030	0.00	0.00
Medium Duty	0.0000052	0.00	0.00
Heavy Duty	0.0000354	0.00	0.00
Heavy Duty Idling	0.0000183	0.00	0.00
Total		0.00	0.01

PM10	**Month**	**1**	**2**
Light Duty Exhaust	0.0000015	0.00	0.00
Medium Duty Exhaust	0.0000024	0.00	0.00
Heavy Duty Idle Exhaust	0.0000099	0.00	0.00
Heavy Duty Exhaust	0.0000863	0.01	0.01
Total Exhaust PM		0.01	0.01
Light Duty Tire and Brake Wear	0.0000155	0.00	0.01
Medium Duty Tire and Brake Wear	0.0000218	0.00	0.00
Heavy Duty Tire and Brake Wear	0.0002575	0.03	0.03
Light Duty Fugitive Road Dust(2)	0.000221	0.03	0.13
Medium Duty Fugitive Road Dust(2)	0.000467	0.05	0.07
Heavy Duty Fugitive Road Dust(2)	0.002314	0.23	0.23
Total Fugitive PM		0.34	0.47
Total		0.35	0.48

PM2.5	**Month**	**1**	**2**
Light Duty Exhaust	0.0000013	0.00	0.00
Medium Duty Exhaust	0.0000023	0.00	0.00
Heavy Duty Idle Exhaust	0.0000095	0.00	0.00
Heavy Duty Exhaust	0.0000825	0.01	0.01
Total Exhaust PM		0.01	0.01
Light Duty Tire and Brake Wear	0.0000046	0.00	0.00
Medium Duty Tire and Brake Wear	0.0000067	0.00	0.00
Heavy Duty Tire and Brake Wear	0.0000824	0.01	0.01
Light Duty Fugitive Road Dust(2)	0.000054	0.01	0.03
Medium Duty Fugitive Road Dust(2)	0.000115	0.01	0.02
Heavy Duty Fugitive Road Dust(2)	0.000568	0.06	0.06
Total Fugitive PM		0.09	0.12
Total		0.09	0.13

CO2e	**Month**	**1**	**2**
Light Duty	0.305	44.91	179.63
Medium Duty	0.529	52.89	79.34
Heavy Duty	3.922	392.17	392.17
Heavy Duty Idling	2.029	4.06	4.06
Total		494.02	655.19

(1) Emfac2021 emission factors for theBAAQMD.

(2) Emission Calculations for travel on paved roads from EPA AP-42 Section 13.2.1, January 2011

E = k(sL)0.91 x (W)1.02

Where: k = 0.0022 lb/VMT for PM10 and k=0.00054 for PM2.5, sL = road silt loading (gms/m2) (0.03 for major/collector roads), W = weight of vehicles (2.5 tons for light; 5.5 for medium trucks, and 24 for heavy trucks)

Appendix A
Bay Area Air Quality Management District
Regulation 2, Rules 1 and 5
Air Quality Analysis
Operational GHG Emissions from Electricity

Assumptions

Electrical Use for One Large Project	60000	kWh/yr
Total Electricity Usage (5 Projects)	300000	kWh/yr

Pollutant	CO2	CH4	N2O	CO2e
Emission Factors (lb/mwh)	204	0.033	0.004	206.017
Emissions (MT/yr)	27.8	0.0	0.0	28.0

Emission Factors from CalEEMod.

[DRAFT NEGATIVE DECLARATION FOR PUBLIC REVIEW AND COMMENT]

CALIFORNIA ENVIRONMENTAL QUALITY ACT
NEGATIVE DECLARATION

Proposed Amendments to
Regulation 2, Rule 1 (Permits – General Requirements) and
Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants)

Pursuant to the California Environmental Quality Act (CEQA), Public Resources Code §§ 21000 et seq, and Sections 15071 and 15074 of the CEQA Guidelines, the Board of Directors of the Bay Area Air Quality Management District (Air District) hereby adopts this Negative Declaration finding that the adoption of Proposed Amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants) will not have a significant effect on the environment.

Project Name: Proposed Amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Proposed Amendments to Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants).

Project Description: The Air District has regulatory authority over stationary sources of air pollution in the San Francisco Bay Area. The proposed amendments to Rules 2-1 and 2-5 address multiple components of the Air District's stationary source permitting program to make it more transparent and health protective.

The proposed amendments to Rule 2-1 add a definition for the term "Overburdened Community," expand the existing public notice requirement to require notification of nearby addresses if a project in an Overburdened Community will require a health risk assessment and extend the Air District's permit application times.

The proposed amendments to Rule 2-5 fall into three major categories: (1) Making the cancer risk limit more stringent in Overburdened Communities; (2) Updating the Air District's Health Risk Assessment Guidelines to include the most recent health risk procedures for gas station projects; and (3) Updating Table 2-5-1, the Toxic Air Contaminant Trigger Levels Table to reflect new health effects values from the California Office of Environmental Health Hazard Assessment and synchronizing the acute trigger levels with those used to implement Air District Regulation 11, Rule 18, which regulates facility-wide toxic air contaminant emissions from existing facilities.

Project Location: The nine-county jurisdiction of the Bay Area Air Quality Management District, which includes all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portions of southwestern Solano County and southern Sonoma County. A map of the project location is provided in Figure 2-1 on page 2-16 of the Initial Study attached hereto.

Project Proponent and Lead Agency: The Bay Area Air Quality Management District.

Finding of No Significant Impact: The Board of Directors of the Bay Area Air Quality Management District hereby finds, using its own independent judgment and analysis, that based on the whole record (including the Initial Study and public comments received) there is no substantial evidence that the proposed

amendments to Regulation 2, Rule 1 (Permits – General Requirements) and Regulation 2, Rule 5 (Permits – New Source Review of Toxic Air Contaminants) will have a significant effect on the environment.

Initial Study: A copy of the Initial Study documenting the reasons supporting the finding of no significant impact is attached hereto.

Mitigation Measures: No mitigation measures need to be included in the project to avoid potentially significant effects, as the project will not have any potentially significant effects.