



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT
SINCE 1955

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

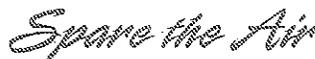
PROJECT TITLE: BAAQMD Regulation 11, Rule 17: Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use

In accordance with the California Environmental Quality Act (CEQA) (California Code of Regulations, Title 14, Sections 15082(a), 15103, and 15375), the Bay Area Air Quality Management District (BAAQMD) will be the Lead Agency for the project identified above and described in the attached Initial Study. Through this Notice of Preparation (NOP) BAAQMD is soliciting information and your views on the scope of the environmental analysis for the proposed project. As detailed in the attached Initial Study, BAAQMD staff has made a preliminary determination that there may be potentially significant impacts to air quality.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. Guy Gimlen at the address shown below, or sent by FAX to (415) 749-4741, or by e-mail to ggimlen@baaqmd.gov. Comments must be received no later than 30 days after receipt of this notice. Please include the name and phone number of the contact person for your agency. Questions relative to the proposed Regulation 11, Rule 17, should be directed to Mr. Guy Gimlen (415) 749-4734, or by email to ggimlen@baaqmd.gov.

The following public workshops and CEQA scoping meetings are scheduled for the proposed Regulation 11-17:

<u>Date</u>	<u>Time</u>	<u>Location</u>
January 10, 2011	1 - 3 pm	Napa County Napa County UC Cooperative Extension Office 1710 Soscol Avenue, Napa, CA 94559
January 11, 2011	6 - 8 pm	Sonoma County Finley Community Center - Cyprus Room 2060 West College Avenue, Santa Rosa, CA 95401
January 12, 2011	1 - 3 pm	Sonoma County Petaluma Community Center - Activity Room 320 North McDowell Blvd., Petaluma, CA 94954
January 18, 2011	3 - 5 pm	Alameda County Martinelli Event Center 3585 Greenville Road, Livermore, CA 94550



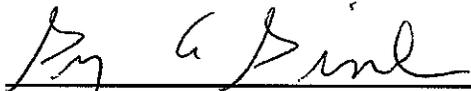
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January 19, 2011	3 – 5 pm	Contra Costa County Office of Weights & Measures - Conference Room 2366A Stanwell Circle, Concord, CA 94520
January 20, 2011	6 – 8 pm	Santa Clara County Gilroy Senior Center 7371 Hanna Street, Gilroy, CA 95020
January 24, 2011	1 – 3 pm	Marin County Dance Palace Community Center 503 B Street, Point Reyes, CA 94956
January 25, 2011	3 – 5 pm	San Mateo County Ocean Shore Train Depot 110 Higgins Canyon Road, Half Moon Bay, CA 94019
January 26, 2011	2 – 4 pm	Solano County Solano County UC Cooperative Extension Office 501 Texas Street, Fairfield, CA 94533

Date: December 30, 2010

Signature: 
 Guy Gimlen
 Senior Air Quality Engineer

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

**Initial Study for
BAAQMD Regulation 11, Rule 17: Limited Use
Stationary Compression Ignition (Diesel) Engines in
Agricultural Use**

**Bay Area Air Quality Management District
939 Ellis Street
San Francisco, California 94109**

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December, 2010

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CHAPTER 1

PROJECT DESCRIPTION

Introduction

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Background

Project Description

PROJECT DESCRIPTION

1.1 INTRODUCTION

The Bay Area Air Quality Management District is proposing Regulation 11, Rule 17: Limited Use Stationary Compression Ignition Engines in Agricultural Service as a local regulation that is equivalent to the Air Toxic Control Measure (ATCM) for Stationary Compression Ignition (CI – also referred to as diesel) Engines adopted by the California Air Resources Board (CARB) for the same category of sources. The intent of this regulation is to adopt CARB requirements for stationary engines in agricultural operations, but to also address local compliance issues faced by operators of low-use stationary agricultural diesel engines.

1.2 AGENCY AUTHORITY

The California Environmental Quality Act (CEQA), Public Resources Code §21000 et seq., requires that the environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. To fulfill the purpose and intent of CEQA, the BAAQMD is the lead agency for this project and has prepared the Notice of Preparation/Initial Study for the proposed Regulation 11, Rule 17 Environmental Impact Report (EIR). An EIR is the appropriate document when there is the potential for significant environmental impacts (CEQA Guidelines Section 15064(a)(1)).

The Lead Agency is the “public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment” (Public Resources Code Section 21067). It was determined that the BAAQMD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as lead agency (CEQA Guidelines Section 15051(b)).

1.3 PROJECT LOCATION

The BAAQMD has jurisdiction of an area encompassing 5,600 square miles. The Air District 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. 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 (see Figure 1-1).

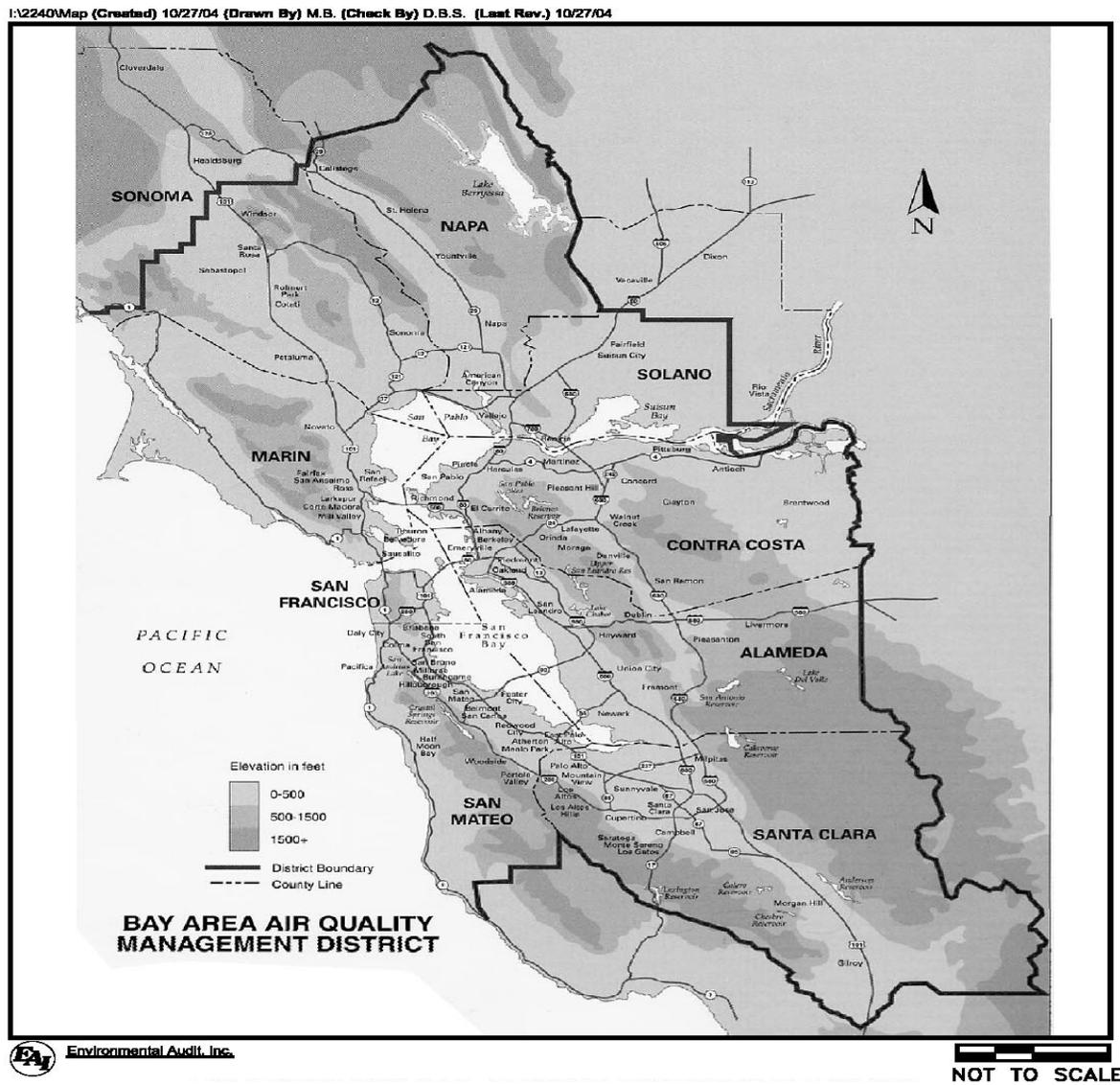


Figure 1-1 Bay Area Air Quality Management District Location

1.4 BACKGROUND

The Air Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (Sections 93115 through 93115.15, Title 17 of the California Code of Regulations, effective October 17, 2007) was originally adopted by CARB pursuant to Section 39650, et seq., of the California Health and Safety Code (H&SC). Section 39650 establishes a program for CARB, along with the Office of Environmental Health Hazard Assessment (OEHHA), to review the health effects of pollutants emitted into the air, to identify those that are most harmful as Toxic Air Contaminants (TACs), and to establish risk reduction plans and regulations to reduce public exposure to TACs they have identified. The particulate fraction of diesel exhaust was identified by CARB as a TAC in 1998, and CARB adopted a Risk Reduction Plan in 2000 that identified the main sources of diesel particulate matter and set out a schedule for regulating them.

CARB adopted an ATCM for stationary CI engines in 2004, which affected diesel engines driving a wide variety of machinery including electrical generators, conveyors, pumps and compressors. The ATCM required all applicable sources of TACs to hold valid operating permits or be registered with the local air district, unless the source is covered by a specific exemption. In 2006, CARB determined that both emergency standby engines and agricultural engines were potentially significant sources of air pollution, so both categories of engines were included in the ATCM and brought into the registration / permit program.

Under Section 39666 of the H&SC, local air districts are charged with implementing and enforcing ATCMs that affect stationary sources. The District has enforced the ATCM for stationary CI engines since it became effective. Section 39666 of the H&SC also allows districts to adopt equivalent or more stringent local rules for the same sources. When the ATCM was amended in 2006 to include stationary agricultural engines, agricultural interests raised concern about replacement of low-use diesel engines. CARB staff and staff from several air quality management districts in the state have been working together to identify acceptable equivalent local rules that resolve the concerns regarding these low-use agricultural diesel engines. The proposed Regulation 11, Rule 17: Limited Use Stationary Compressions Ignition Engines in Agricultural Use is the result of that effort in the Bay Area.

The CARB ATCM specifically exempted diesel engines in agricultural use when approved in 2004. However, further study indicated the emissions from agricultural diesel engines were significant, and agricultural engines needed to be controlled or replaced. When the ATCM was updated in 2006, agricultural diesel engines were no longer exempt. CARB included exemptions for diesel driven air movement fans used for frost protection in orchards and vineyards, and for agricultural standby emergency generators. However, CARB failed to include exemptions for other low-use diesel engines and water pumps used to spray water as an alternate method of frost protection. The ATCM requires that diesel engines larger than 100 horsepower (hp) meet new emissions standards by December 31, 2010, and diesel engines from 50 – 100 hp meet

the new standards by December 31, 2011. Most engines must be replaced to meet the new standards. Regulation 11, Rule 17 is designed to provide a deferred timetable for replacement of limited use diesel engines because: (1) Most low-use agricultural diesel engines are no where near their end of useful life, so early replacement represents an economic penalty that was not adequately considered in CARB's ATCM economic analysis; and (2) Tier 4 engines are scheduled to be available in the 2014/2015 timeframe. Replacing current low-use agricultural diesel engines with Tier 4 engines will substantially reduce long-term emissions.

In addition, orchards and vineyards occasionally need to use diesel driven water pumps to protect crops if they suffer from lack of water during excessive heat in summer, or from freezing in winter. These orchards and vineyards are equipped with sprinkler systems used to provide supplemental water when needed during extremely hot and dry summer days (usually in August and September), and to provide frost protection during the coldest parts of the spring (February to April). Water for supplemental irrigation is very seldom used because most fruit trees and grape vines have deep roots, and quality of the fruit is degraded with excess water. Similarly, frost protection is seldom needed and the number of days and hours of potential frost are highly variable each year, averaging about 80 hours per year. These pumps provide water to frost protection sprinklers, generally during the early morning hours.

CARB based its cost effectiveness analysis of the ATCM on "irrigation pumps" like those in the central valley, and did not consider "minor supplemental irrigation" or "frost protection" pumps. CARB staff assumed that most of these engines operated more than 1000 hours per year (which is normal for irrigation pumps). Engines that operate 1000 hours per year and are over 20 years old are typically near their end of useful life and would need to be rebuilt or replaced (assuming a typical ~20,000 hour life). However the lower usage (under 100 hours per year) supplemental irrigation and frost protection diesel engines do not wear out as quickly. Low-use agricultural diesel engines can have significant remaining life, and this loss of remaining life was not included in CARB's economic evaluation. In addition, emissions were overestimated based on assuming 1000 hours of operation per year. The cost of reducing emissions by replacing low-use agricultural pumps under the schedule in the ATCM is much higher than estimated by CARB.

1.5 PROJECT DESCRIPTION

The ATCM for stationary CI engines requires the replacement of all agricultural diesel engines in the District by the end of 2010 or 2011 (depending on their size). Regulation 11, Rule 17 would allow compliance through other options that are equivalent to the ATCM. Specific elements of the proposed rule are discussed below.

The District has been implementing CARB's ATCM since it was first approved in 2004. As required by the amendments effective October, 2007, all stationary agricultural diesel engines over 50 HP must be registered with the District. The District has registered

approximately 300 agricultural diesel engines to date. Over the three years since CARB's ATCM became effective for agricultural engines, affected farmers and District staff have commented to CARB staff that an exemption was needed for low-use agricultural diesel engines. After review and evaluation of potential options, District staff has developed a proposed rule that incorporates a combination of alternatives, including a very limited exemption for the least used engines, a compliance extension for low-use engines that would allow their replacement with Tier 4 engines over a longer period of time, and shorter time periods for certain engines to come into compliance.

A. Exemption for Very Low-Use Engines

Proposed Regulation 11, Rule 17 would exempt from emissions control requirements any agricultural engine that operates fewer than 20 hours per year, and is located more than 200 meters (about one-eighth mile) from a residential area, school, or health facility. This is consistent with the provisions currently included in the ATCM for emergency standby engines. The owner or operator of the exempt engine is required to maintain records of use to substantiate the exempt status.

B. Alternative Compliance Plan for Low-Use Engines

Under the proposed Regulation 11, Rule 17, the owner or operator of an agricultural diesel engine may apply for alternate compliance by petitioning the District for approval of a low-use Alternative Compliance Plan (low-use ACP). There are five criteria for an agricultural engine to be eligible for the low-use ACP:

- The engine must be used exclusively for an agricultural operation;
- The engine must be equipped with a non-resettable hour meter;
- The engine must be registered with the District's Agricultural Engine Registration Program;
- The engine must operate fewer than 100 hours per year;
- The engine must be located more than 200 meters from a residential area, school, or health facility. If the engine is located 200 meters or less from a residential area, school, or health facility, a Health Risk Screening Assessment approved by the District must document the health risk is less than 1 in a million.

If the low-use ACP is approved by the Air Pollution Control Officer (APCO), the engine may continue to operate for an extended period until the time it is required by District Regulation 11, Rule 17 to comply with the emissions standards of the ATCM. The proposed alternate deadlines for ATCM compliance are based on the engine Tier, as follows:

- Tier 0 engines may continue to operate for up to 100 hours per year until December 31, 2020.
- Tier 1 engines may continue to operate for up to 100 hours per year until December 31, 2020.
- Tier 2 engines may continue to operate for up to 100 hours per year until December 31, 2025.

Each engine must be replaced with the highest tier (lowest emissions) engine available for purchase at the time of replacement. The ACP deadlines are designed to enable replacement of existing engines with Tier 4 engines. In addition, the owner or operator of each engine must record its use and report it to the District each year at the time of registration / permit renewal.

Shortened Compliance Term for Engines No Longer Eligible for an Exemption or Low-Use ACP

CARB's ATCM provides a period of up to eighteen months for an agricultural engine that loses its exempt status to come into compliance with the otherwise applicable emissions standards. Proposed Regulation 11, Rule 17 shortens that period for engines that can no longer meet the requirement for an exemption or the terms of their approved low-use ACP. The proposed rule would allow six months to remove the engine from service or replace it with an engine that complies with the otherwise applicable standards.

Sources Affected by Proposed Regulation 11, Rule 17

There are currently three hundred three (303) agricultural engines registered with the District. The number of engines registered has increased approximately 10 percent since August, 2010. In August there were two hundred and seventy nine (279) agricultural engines registered with the District. Analysis of emissions, and potential emissions reductions were based on the 279 diesel engines in August. While there may be additional engines registered in the future, the existing inventory of registered engines that may be affected is as follows:

- 64 engines operate fewer than 20 hours per year and are potentially eligible to be exempted from control requirements. Four (4) of these engines are fueled by propane, so are already exempt. In addition, 12 of these appear to be located close to housing, a school or a health facility, so they may not qualify for the proposed exemption. Thus, approximately 48 additional engines are expected to be exempt.
- 90 engines operate more than 20 hours per year, but fewer than 100 hours per year, and may qualify for a low-use Alternate Compliance Plan. Three (3) of these engines are Tier 3 engines that already meet the emissions standards, and 3

more of these engines are fueled by propane so are already exempt. Thus, eighty four (84) may be eligible for the ACP.

Emissions Impacts of ATCM

The CARB ATCM has already had a significant impact on emissions. Mobile and prime use stationary diesel engines are being replaced with newer clean burning engines. Early replacement of agricultural diesel engines through use of incentives from the Carl Moyer Program and the Agricultural Assistance Program have resulted in 65 agricultural diesel engines with new cleaner burning diesel engines. Estimated emissions reductions from these 65 replacements engines are:

- Non-Methane Hydrocarbon 2.26 tons per year
- NOx 23.73 tons per year
- Particulate Matter 0.89 tons per year

Emissions Impacts of Proposed Rule

Implementation of proposed Regulation 11, Rule 17 will delay fully achieving additional emissions reductions from low use agricultural engines up to 10 – 15 years, but will ultimately result in greater overall emissions reductions than anticipated by the ATCM, as shown in the table below. The low-use ACP provides the advantage of delaying replacement of agricultural diesel engines until Tier 4 engines are available. Replacement with Tier 4 engines provides the added benefit of even lower long-term emissions for the life of these replacement engines (typically more than 20 years).

Pollutant	Current Emissions	Emissions after Replacement per ATCM	Emissions after Replacement per Reg. 11-17
Non-methane Hydrocarbon (VOC)	1.05 tpy	0.49 tpy	0.16 tpy
Nitrogen Oxides (NO _x)	11.77 tpy	3.25 tpy	0.42 tpy
Particulate Matter (PM)	0.64 tpy	0.23 tpy	0.02 tpy

CHAPTER 2

ENVIRONMENTAL CHECKLIST FORM

Introduction
General Information
Potentially Significant Impact Areas
Determination
Environmental Checklist and Discussion

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

References

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Bay Area Air Quality Management District (BAAQMD) Proposed Amendments to Regulation 11, Rule 17.
Lead Agency Name:	Bay Area Air Quality Management District
Lead Agency Address:	939 Ellis Street San Francisco, California 94109
Contact Person:	Guy Gimlen
Contact Phone Number:	415-749-4734
Project Location:	This rule adoption applies 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 and southern Sonoma Counties.
Project Sponsor's Name:	Bay Area Air Quality Management District
Project Sponsor's Address:	939 Ellis Street San Francisco, California 94109
General Plan Designation:	Rule 11-17 applies to low-use stationary agricultural diesel engines.
Zoning:	Rule 11-17 applies to low-use stationary agricultural diesel engines in agricultural uses, primarily at orchards and vineyard throughout the District, which are primarily located in agricultural areas.
Description of Project:	See "Background" in Chapter 2.
Surrounding Land Uses and Setting:	See "Affected Area" in Chapter 2.
Other Public Agencies Whose Approval is Required:	None

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 a "✓" 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.

- | | | |
|--------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------------------------------------|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology / Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Transportation / Traffic | <input type="checkbox"/> Utilities / Service Systems | <input checked="" type="checkbox"/> 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:

Printed Name:

Date:

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 above 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 checklist 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
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I. AESTHETICS.

Would the project:

a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 proposed rule adoption focuses on Toxic Air Contaminant (TAC) emissions from low-use stationary agricultural diesel engines in agricultural uses. Rule adoption for these low-use stationary diesel engines will affect a portion of the agriculture operations within the Bay Area, particularly those that operate as orchards and vineyards. It is not uncommon for scenic highways or corridors to be located in the vicinity of agricultural areas.

Regulatory Background

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

Discussion of Impacts

I a-d. The proposed adoption of Regulation 11-17 would exempt or defer from emission control requirements compliance dates for specific low-use stationary diesel engines in agricultural uses based on engine size, hours of operation, and proximity to residences, schools or health care facilities in the Bay Area. The proposed rule is not expected to require the construction of any major new structures that would be visible to areas outside of existing agricultural boundaries, and is not expected to result in any adverse aesthetic impacts. Once implemented, the modifications would involve replacement of existing equipment with new equipment, which is expected to be the same size and location as existing equipment. The low-use stationary diesel engines affected by the proposed rule are located within existing agricultural areas within the Bay Area, which are not currently in areas that are in conflict with scenic vistas. The proposed Regulation 11-17 is not expected to require any construction activities, and is not expected to result in adverse aesthetic impacts. Therefore, the replacement of old equipment with new equipment within existing agricultural areas is not expected to generate significant adverse impacts on aesthetics. The proposed Regulation 11-17 would also not require any new sources of light or glare, since new equipment would largely replace existing equipment and light sources are not required for the use of diesel engines.

Conclusion

Based upon these considerations, no significant adverse aesthetic impacts are expected from the implementation of Regulation 11-17. Therefore, agricultural resources impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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II. AGRICULTURE and FOREST 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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. Some of these agricultural lands are under Williamson Act contracts.

The proposed adoption of Regulation 11-17 will affect low-use stationary agricultural diesel engines in existing agricultural areas within the Bay Area. Agricultural or forest resources are currently located within the areas affected by the proposed project in the Bay Area.

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.

Discussion of Impacts

II a-e. The proposed adoption of Regulation 11-17 would exempt or defer from emission control requirements compliance dates for specific low-use stationary diesel engines in agricultural uses based on engine size, hours of operation, and proximity to residences, schools or health care facilities in the Bay Area. The areas affected by the proposed project are located in agricultural areas where agricultural resources are located. Replacing existing equipment in agricultural areas will not require construction activities as these engines are generally portable. Any new equipment will be replacing equipment of similar size and configuration in existing agricultural applications, thus, no significant adverse impacts to agricultural and forest resources are expected as a result of the implementation of the proposed regulation.

Conclusion

Based upon these considerations, no significant adverse impacts on agricultural or forest resources are expected from the implementation of Regulation 11-17. Therefore, agricultural resources impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Violate any air quality standard or contribute to an existing or projected air quality violation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) 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 (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Setting

The BAAQMD covers all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties, and portion of southwestern Solano and southern Sonoma Counties.

The summer climate of the West Coast is dominated by a semi-permanent high centered over the northeastern Pacific Ocean. Because this high pressure cell is quite persistent, storms rarely affect the California coast during the summer. Thus the conditions that persist along the coast of California during summer are a northwest air flow and negligible precipitation. A thermal low pressure area from the Sonoran-Mojave Desert also causes air to flow onshore over the San Francisco Bay Area much of the summer. In winter, the Pacific High weakens and shifts southward, upwelling ceases, and winter storms become frequent. Almost all of the Bay Area’s annual precipitation takes place in the November through April period. During winter periods when the Pacific high

becomes dominant, inversions become strong and often are surface based; winds are light and pollution potential is high. These periods are characterized by winds that flow out of the Central Valley into the Bay Area and often include tule fog.

A primary factor in air quality is the mixing depth, i.e., the vertical dimension available for dilution of contaminant sources near the ground. Over the Bay Area, the frequent occurrence of temperature inversions limits this mixing depth and consequently limits the availability of air for dilution. A temperature inversion may be described as a layer or layers of warmer air over cooler air.

The Bay Area is subject to a combination of physiographic and climatic factors which result in a low potential for pollutant buildups near the coast and a high potential in sheltered inland valleys. In summer, areas with high average maximum temperatures tend to be sheltered inland valleys with abundant sunshine and light winds. Areas with low average maximum temperatures are exposed to the prevailing ocean breeze and experience frequent fog or stratus. Locations with warm summer days have a higher pollution potential than the cooler locations along the coast and bays.

In winter, pollution potential is related to the nighttime minimum temperature. Low minimum temperatures are associated with strong radiation inversions in inland valleys that are protected from the moderating influences of the ocean and bays. Conversely, coastal locations experience higher average nighttime temperatures, weaker inversions, stronger breezes and consequently less air pollution potential.

Air quality conditions in the San Francisco Bay Area have improved since the District was created in 1955. Ambient concentrations of air pollutants and the number of days on which the region exceeds air quality standards have fallen dramatically. The District is in attainment of the State and federal ambient air quality standards for CO, NO_x, and SO₂. The District is not considered to be in attainment with the federal and state ozone standards, and state PM₁₀ and PM_{2.5} standards.

Regulatory Background

Criteria Pollutants

The Clean Air Act (CAA) Amendments of 1990 give the U.S. EPA 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 BAAQMD, are responsible for overseeing stationary source emissions, approving permits, maintaining emission inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

Discussion of Impacts

III a. Regulation 11-17 is being proposed as a local regulation that is equivalent to the ATCM for Stationary Compression Ignition Engines adopted by CARB for the same category of sources. Under Section 39666 of the H&SC, local air districts are charged with implementing and enforcing ATCMs that affect stationary sources. Section 39666 of the H&SC also allows districts to adopt equivalent or more stringent local rules for the same sources. When the ATCM was amended in 2006 to include stationary agricultural engines, agricultural interests raised concern about replacement of low-use diesel engines. CARB staff and staff from several air quality management districts in the state have been working together to identify acceptable equivalent local rules that resolve the concerns regarding these low-use agricultural diesel engines.

Implementation of proposed Regulation 11, Rule 17 will delay fully achieving some emissions reductions from low use agricultural engines up to 10 – 15 years, but will ultimately result in greater overall emissions reductions than anticipated by the ATCM. The low-use ACP provides the advantage of delaying replacement of agricultural diesel engines until Tier 4 engines are available.

Regulation 11-17 is not identified as a control measure in the 2010 Clean Air Plan, therefore, the proposed rule will not conflict with an applicable air plan. Replacement of these engines by the years 2020 through 2025 provides the added benefit of even lower long-term emissions for the life of these replacement engines (typically more than 20 years).

III b, c. Implementation of proposed Regulation 11, Rule 17 will delay fully achieving some emissions reductions from low use agricultural engines up to 10 – 15 years. The proposed regulation will ultimately result in greater overall emissions reductions than anticipated by the ATCM; however, during certain interim years certain specified engines will be allowed to continue operations at higher emission limits than currently allowed by the ATCM. Because of the number of agricultural engines currently in operation, the emissions reductions postponed during interim years are potentially significant and will be evaluated in the EIR.

III d. Agricultural operations are expected to comply with Regulation 11, Rule 17 by the replacement of older low-use stationary diesel engines with new diesel engines. In order to comply with the proposed regulation, agricultural diesel engines must operate less than 100 hours per year and be located more than 200 meters (about one-eighth mile) from residential areas, schools, and health care facilities (unless a health risk screening assessment indicates a health risk less than one per million). Engines that do not meet these requirements are not eligible for the delay in engine replacement. Most, if not all, engines affected by the proposed rule are located in lightly populated areas. Engines eligible for an alternative compliance plan (ACP) under the proposed rule would operate on a very limited basis and would be located at least 200 meters from a residential area, school, or health facility. It is not anticipated that the proposed rule would result in

sensitive receptors being exposed to substantial pollutant concentrations. The EIR will examine this potential impact, however, to assure that any such potential impact is considered.

III e. The proposed project is not expected to result in an increase in odors. Affected agricultural operations are expected to comply by replacing existing low-use stationary diesel engines. While the replacement low-use stationary diesel engines will produce less PM and NOx emissions, they will continue to be fueled with diesel, which will not change the fuel source, the hours of use, or result in an increase in odors produced during operation. Potential odor impacts associated with the adoption of proposed Regulation 11-17 are not expected to be significant.

Conclusion

Based upon these considerations, the potentially significant adverse air quality impacts associated with the delay in compliance of up to 10-15 years for some diesel engines will be evaluated in the EIR. The emission impacts during the interim years will be evaluated to determine if air quality impacts would be significant.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- | | | | | | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) | Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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. A wide variety of biological resources are located within the Bay Area.

The areas affected by the proposed rule are located in the Bay Area-Delta Bioregion (as defined by the State’s Natural Communities Conservation Program). This Bioregion is comprised of a variety of natural communities, which range from salt marshes to chaparral to oak woodland. The areas affected by the proposed project are located within existing agricultural areas within the Bay Area. The affected areas have been graded to develop various agricultural operations. Native vegetation has generally been removed from agricultural areas to accommodate agricultural species.

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 Game, 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 Game 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.

Discussion of Impacts

IV a – f. No impacts on biological resources are anticipated from the proposed rule adoption which would apply to existing equipment in agricultural areas. Existing equipment affected by the proposed project is located within agricultural areas, which do not typically include sensitive biological species. The agricultural areas have been graded and developed for agricultural applications, and native biological resources (other than crops) have been removed. There are no construction activities associated with the proposed adoption of Regulation 11-17 as existing diesel engines would only need to be replaced and no development outside of existing areas is expected.

Conclusion

Based upon these considerations, no significant adverse biological impacts are expected from the implementation of Regulation 11-17. Therefore, biological resource impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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V. CULTURAL RESOURCES.

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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. Cultural resources are defined as buildings, sites, structures, or objects which might have historical architectural, archaeological, cultural, or scientific importance.

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.

The new equipment affected by the proposed rule amendments are within agricultural areas located in the Bay Area. These areas have already been graded to allow for agricultural operations. These areas generally have been used to support agricultural operations for many decades.

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 Sections 50020.1(k) and 5024.1(g).

Discussion of Impacts

V a – d. No impacts on cultural resources are anticipated from the proposed rule adoption that would apply to low-use stationary diesel engines used for agricultural purposes. The equipment affected by the proposed project already exists and would be replaced. Any replacement of existing equipment with new equipment would occur within the boundaries of existing agricultural operations. The existing areas have been graded and developed for agricultural purposes. No new construction would be required due to the adoption of the proposed Regulation 11-17. Therefore, no significant adverse impacts to cultural resources are expected due to the proposed adoption of Regulation 11-17.

Conclusion

Based upon these considerations, no significant adverse impacts to cultural resources are expected from the adoption of the proposed Regulation 11-17. Therefore, cultural resources impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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VI. GEOLOGY / SOILS.

Would the project:

a) Expose people or structures to 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 know fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 facilities affected by the proposed rule amendments are located in agricultural areas within the Bay Area.

The San Francisco Bay Area is a seismically active region, which is situated on a 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). In the Bay area, these faults include the San Andreas, Hayward, Rodgers Creek-Healdsburg, Concord-Green Valley, Greenville-Marsh Creek, Seal Cove/San Gregorio and West Napa faults. 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.

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 Uniform Building Code is the principle 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 review procedures that will reduce losses from ground failure during future earthquakes.

Discussion of Impacts

VI a. The equipment affected by the proposed project already exists and is located within agricultural areas. No new construction activities are expected to be required as a result of adopting the proposed Regulation 11-17, rather, old equipment would be required to be placed with new equipment. Since no new structures will be required to be built as a result of the adoption of Regulation 11-17, permits complying with the Uniform Building Code will not be required and no new structures would be subject to the effects of ground shaking. Since no new construction is required as a result of Regulation 11-17, no significant impacts from seismic hazards are expected.

VII b. No new construction activities would be required due to the adoption of Regulation 11-17. Equipment affected by the proposed project already exists and is located within the confines of existing agricultural operations. Any new equipment would be installed within the agricultural areas in the same or similar locations. Therefore, the proposed project is not expected to result in substantial soil erosion or the loss of topsoil as no major construction activities would be required.

VII c – e. The equipment affected by the proposed project already exists and no major construction activities are required to replace existing diesel engines. Therefore, the proposed project will not require construction activities on a geologic unit or soil that is unstable or that would become unstable, or potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Likewise, since no construction is required, no structure would be constructed on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. Since no construction would be required, the proposed project would not affect 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, thus, the proposed project is not expected to have significant impacts on wastewater treatment/disposal systems. Therefore, no adverse significant impacts to geology and soils are expected due to the proposed adoption of Regulation 11-17.

Conclusion

Based upon these considerations, no significant geology and soils impacts are expected from the adoption and implementation of Regulation 11-17. Therefore, geology/soils impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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VII. GREENHOUSE GAS EMISSIONS.

Would the project:

- | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
-

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 warming, a related concept, is the observed increase in the average temperature of the earth’s surface and atmosphere. One identified cause of global warming is an increase of greenhouse gases (GHGs) in the atmosphere. The six major GHGs identified by the Kyoto Protocol are CO₂, methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), haloalkanes (HFCs), and perfluorocarbons (PFCs). The GHGs absorb longwave radiant energy reflected by the earth, which warms the atmosphere. GHGs also radiate longwave radiation both upward to space and back down toward the surface of the earth. The downward part of this longwave radiation absorbed by the atmosphere is known as the "greenhouse effect." Some studies indicate that the potential effects of global climate change may include rising surface temperatures, loss in snow pack, sea level rise, more extreme heat days per year, and more drought years.

Events and activities, such as the industrial revolution and the increased combustion of fossil fuels (e.g., gasoline, diesel, coal, etc.), have heavily contributed to the increase in atmospheric levels of GHGs. Approximately 80 percent of GHG emissions in California are from fossil fuel combustion and over 70 percent of GHG emissions are carbon dioxide emissions.

Regulatory Background

In response to growing scientific and political concern regarding global climate change, California has adopted a series of laws to reduce both the level of GHGs in the atmosphere and to reduce emissions of GHGs from commercial and private activities

within the state. In September 2006, Governor Schwarzenegger signed California's Global Warming Solutions Act of 2006 (AB32). AB32 required CARB to:

- Establish a statewide GHG emissions cap for 2020, based on 1990 emissions, by January 1, 2008;
- Adopt mandatory reporting rules for significant sources of GHG emissions by January 1, 2008;
- Adopt an emissions reduction plan by January 1, 2009, indicating how emissions reductions will be achieved via regulations, market mechanisms, and other actions; and,
- Adopt regulations to achieve the maximum technologically feasible and cost-effective reductions of GHGs by January 1, 2011.

There has also been activity at the Federal level on the regulation of GHGs. In *Massachusetts v. Environmental Protection Agency* (Docket No. 05-1120), argued November 29, 2006 and decided April 2, 2007, the U.S. Supreme Court held that not only did the U.S. EPA have authority to regulate greenhouse gases, but that the U.S. EPA's reasons for not regulating greenhouse gases did not fit the statutory requirements. The U.S. Supreme Court ruled that CO₂ and other greenhouse gases are pollutants under the Clean Air Act, which U.S. EPA must regulate if it determines they pose an endangerment to public health or welfare. On October 30, 2009, the U.S. EPA issued 40 CFR Part 98, which requires reporting of greenhouse gas (GHG) emissions from large sources and suppliers in the United States. Under Part 98, suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to EPA, with abbreviated report required in 2011 (for 2010 emissions), and full reporting in 2012 (for 2011 emissions). Part 98 became effective December 29, 2009.

Discussion of Impacts

VII a., b. The proposed project would delay the implementation of CARB's ATCM for certain low use diesel engines in agricultural uses. Implementation of the ATCM or the proposed regulation is not expected to result in a significant increase in GHG emissions. The proposed regulation would result in the use of more Tier 4 diesel engines reducing the overall particulate matter emissions. However, additional Tier 4 diesel engines could result in a slight increase in GHG emissions if additional air pollution control equipment and/or engine design resulted in a potential loss of engine efficiency and a potential increase in GHG emissions. The potential GHG impacts will be further evaluated in the EIR.

Conclusion

Based upon these considerations, greenhouse gas and climate change impacts will be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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VIII. HAZARDS AND 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | ?? |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Setting

The affected agricultural operations affected by the proposed project do not handle and or process large quantities of flammable, hazardous, and acutely hazardous materials. Agricultural operations that use diesel engines handle and transport diesel fuel. Diesel fuel is considered to be a combustible liquid with a moderate fire hazard. Vapors may be ignited rapidly when exposed to heat, spark, open flame or other ignition source. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to the sewer may cause fire or explosion hazard.

For all affected facilities, risks to the public are reduced if there is a buffer zone between industrial processes and residences or other sensitive land uses, or the prevailing wind blows away from residential areas and other sensitive land uses. The risks posed by operations at each facility are unique and determined by a variety of factors. The areas affected by the proposed project are generally located in agricultural areas.

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.

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, 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.

California Assembly Bill 2185 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.

Discussion of Impacts

VIII a - c. It is expected that the proposed adoption of Regulation 11-17 will lead to the replacement of low-use stationary diesel engines with newer diesel engines of similar size. Diesel engines use diesel fuel which is a hazardous material. The proposed regulation is not expected to change or increase the potential hazards associated with the use of diesel fuels. Therefore, the proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Further, the proposed project will not create a significant increase in hazards to the public in the event of an upset or accident involving the release of hazardous materials into the environment.

Finally, the proposed project would not increase hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. In order to comply with the proposed regulation, agricultural diesel engines must operate less than 100 hours per year and be located more than 200 meters (about one-quarter mile) from residential areas, schools, and health care facilities (unless a health risk screening assessment indicates a health risk less than one per million). Engines that do not meet these requirements are not eligible for the delay in engine replacement.

Therefore, the proposed adoption of Rule 11-17 is not expected to generate significant adverse hazard impacts as it is not expected to increase the use of diesel fuel, or any other hazardous material.

VIII d. No impacts on hazardous material sites are anticipated from the proposed project. Operating agricultural areas are generally not located on the hazardous materials sites list pursuant to Government Code Section 65962.5. Additionally, the proposed project would have no affect on hazardous materials nor would the proposed project create a significant hazard to the public or environment. Low-use stationary diesel engines already exist and are located at existing agricultural operations. The proposed project neither requires, nor is likely to result in, activities that would affect hazardous materials or existing site contamination. Therefore, no significant adverse impacts on hazards are expected.

VIII e – f. No impacts on airports or airport land use plans are anticipated from the adoption of Regulation 11-17. The low-use stationary diesel engines already exist and are located within the confines agricultural operations. Once the proposed project is implemented, agricultural operations would be expected to comply by replacing existing low-use stationary diesel engines with new ones. These changes are expected to be made within the confines of existing agricultural areas. No development outside of existing agricultural operations is expected to be required as a result of the adoption of Regulation 11-17. Therefore, no significant adverse impacts on an airport land use plan or on a private air strip are expected.

VIII g. No impacts on emergency response plans are anticipated from the proposed project that would apply to existing agricultural operations. The low-use stationary diesel engines already exist and are located within the confines of existing agricultural operations. The proposed project neither requires, nor is likely to result in, activities that would impact any emergency response plan, therefore, no significant adverse impacts on emergency response plans are expected.

VIII h. No increase in hazards related to wildfires are anticipated from the proposed project. The low-use stationary diesel engines affected by the proposed project already exist and are located within the confines of existing agricultural operations. The proposed project will not increase the use of diesel fuel or any other flammable materials. Native vegetation has been removed from the agricultural areas to accommodate crops. Therefore, no increase in exposure to wildfires will occur due to the proposed adoption of Regulation 11-17.

Conclusion

Based upon these considerations, no significant adverse hazards and hazardous materials impacts are expected from the adoption of Regulation 11-17. Therefore, hazards and hazardous material impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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IX. HYDROLOGY / WATER QUALITY.

Would the project:

- a) Violate any water quality standards or waste discharge requirements?

b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Substantially alter the existing drainage pattern of the site or area, including through alteration of 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e)	Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g)	Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j)	Inundation by seiche, tsunامي, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 and affected environment vary substantially throughout the area and include commercial, industrial, residential, agricultural, and open space uses.

The agricultural operations affected by the proposed Regulation 11-17 are located throughout the District. Affected areas are generally surrounded by other agricultural operations. Reservoirs and drainage streams are located throughout the area and discharge into the Bays. Marshlands incised with numerous winding tidal channels containing brackish water are located throughout the Bay Area.

The affected areas are located within the San Francisco Bay Area Hydrologic Basin. The primary regional groundwater water-bearing formations include the recent and Pleistocene (up to two million years old) alluvial deposits and the Pleistocene Huichica formation. Salinity within the unconfined alluvium appears to increase with depth to at least 300 feet. Water of the Huichica formation tends to be soft and relatively high in bicarbonate, although usable for domestic and irrigation needs.

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 1987 amendments to the Clean Water Act enabled the U.S. EPA to regulate, under the National Pollutant Discharge Elimination System (NPDES) program, discharges from industries and large municipal sewer systems. The State of California, through the State Water Resources Control Board (SWRCB), has authority to issue NPDES permits, which meet U.S. EPA requirements, to specified industries.

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. 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.

Discussion of Impacts

IX a, f. No significant adverse impacts on hydrology and water quality resources are anticipated from the proposed project, which would apply to existing low-use agricultural diesel engines. Diesel engines are not a source of water use or wastewater generation. Therefore, the proposed project would not require additional water use or an increase in wastewater discharged. Therefore, no violation of any water quality standards or waste discharge requirements, and no decrease in water quality is expected from adoption of the proposed Regulation 11-17.

IX b. The low-use stationary diesel engines affected by the proposed project already exist and are located within existing agricultural areas. The proposed adoption of Regulation 11-17 will not require additional water use. Therefore, the proposed project is not expected to deplete groundwater supplies or interfere with groundwater recharge. Therefore, no significant impacts on groundwater supplies are expected due to the adoption of proposed Regulation 11-17.

IX c - e Agricultural operations are expected to comply with the proposed Regulation 11-17 by replacing existing low-use stationary diesel engines with new engines. No construction activities outside are expected to be required and no increase in paved areas are expected. Therefore the proposed project is not expected to substantially 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. Nor would the proposed project create or contribute additional runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The proposed project is not expected to substantially degrade water quality. Therefore, no significant adverse impacts to storm water runoff are expected.

IX g – i. The low-use stationary diesel engines affected by the proposed project are located within agricultural areas. No major construction activities are expected due to the adoption of the proposed Regulation 11-17. The proposed Regulation would not result in the construction on any housing or place houses within a 100-year flood plain. Diesel engines are generally portable and can be easily moved to avoid areas subject to flowing. The proposed project is not expected to require any substantial construction activities, place any additional structures within 100-year flood zones, or other areas subject to flooding. Therefore, no significant adverse impacts due to flooding are expected.

IX j. The agricultural operations affected by the proposed project are located within agricultural areas. No construction activities are expected due to the adoption of the proposed Regulation 11-17. The proposed project is not expected to place any additional structures within areas subject to inundation by seiche, tsunami or mudflow. Therefore, no significant adverse impacts on hydrology/water due to seiche, tsunami or mudflow are expected.

Conclusions

Based upon these considerations, no significant adverse hydrology and water quality impacts are expected from the implementation of the proposed Regulation 11-17. Therefore, hydrology and water quality impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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X. LAND USE / PLANNING.

Would the project:

- | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to a general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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 facilities affected by the proposed rule amendments are primarily located in agricultural 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.

Discussion of Impacts

X a-c. The low-use stationary diesel engines affected by the proposed project already exist and are located within existing agricultural areas. The agricultural operations are expected to comply with Regulation 11-17 by replacing existing equipment with new stationary diesel engines. No construction activities and no land use impacts are expected as a result of the proposed project.

Conclusion

Based upon these considerations, no significant adverse land use impacts are expected from the adoption of the proposed Regulation 11-17. Therefore, land use impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XI. MINERAL RESOURCES.

Would the project:

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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 and the affected environment vary greatly throughout the area. The operations affected by the proposed rule amendments are primarily located in agricultural areas within the Bay Area.

Regulatory Background

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

Discussion of Impacts

XI a-b. The low-use stationary diesel engines affected by the proposed project already exist and are located within existing agricultural areas. The affected engines are not expected to require any construction activities or impact any mineral resources. The proposed project is 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. Therefore, no impacts on mineral resources are expected.

Conclusion

Based upon these considerations, significant mineral resource impacts are not expected from the adoption of the proposed Regulation 11-17. Therefore, mineral resource impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XII. NOISE.

Would the project:

a) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Expose persons to or generate of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 and the affected environment vary greatly throughout the area. The facilities affected by the proposed project are located in agricultural areas of the Bay Area, which are generally surrounded by other agricultural operations.

Regulatory Background

Noise issues 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.

Discussion of Impacts

XII a-d. The low-use stationary diesel engines affected by the proposed project already exist and are located within the confines of existing agricultural operations. The proposed rule would exempt or defer from emission control requirements compliance dates for specific low-use stationary diesel engines in agricultural uses based on engine size, hours of operation, and proximity to residences, schools or health care facilities in the Bay Area. Compliance will be achieved in the form of replacement of existing low-use stationary diesel engines with new equipment.

No construction activities are expected as a result of adopting Regulation 11-17. Therefore, noise related to construction activities would not be associated with the proposed project.

Proposed Regulation 11-17 would required the replacement of certain low-use diesel engines. The proposed regulation would not result in an increase in the number of diesel engines or an increase in size of the diesel engines. It is expected that each agricultural operation affected will comply with all existing noise control laws or ordinances. Further, OSHA and California-OSHA (Cal/OSHA) have established noise standards to protect worker health. Any new replacement diesel engine is expected to operate at similar noise levels as existing equipment, so no increase in noise levels is expected. Therefore, no significant adverse impacts to noise are expected due to the proposed project.

It is also not anticipated that new low-use stationary diesel engines will cause an increase in groundborne vibration levels because such engines are not typically vibration intensive equipment. Consequently, the proposed project will not directly or indirectly cause substantial noise or excessive groundborne vibration impacts.

The proposed project would not substantially increase ambient noise levels from stationary sources, either intermittently or permanently. Therefore, noise impacts associated with the proposed regulation are expected to be less than significant.

XII e-f. If applicable, the agricultural operations would still be expected to comply, and not interfere, with any applicable airport land use plans. Regulation 11-17 would require the replacement of certain existing diesel engines with newer engines and would not result in an increase in noise or impact an airport land use plan. All noise producing equipment must comply with local noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements.

Conclusion

Based upon these considerations, significant noise impacts are not expected from the adoption of the proposed Regulation 11-17. Therefore, noise impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
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XIII. POPULATION / HOUSING.

Would the project:

- | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace a substantial number of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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 and the affected environment vary greatly throughout the area. The areas affected

by the proposed project are located throughout the area within the jurisdiction of the BAAQMD.

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.

Discussion of Impacts

XIII a. No construction activities associated with Regulation 11-17 are expected, thus, relocation of individuals, the requirement new housing or commercial facilities, or changes to the distribution of the population is not anticipated. Further, replacing existing equipment with new equipment will not require any new employees. Human population within the jurisdiction of the BAAQMD is anticipated to grow regardless of implementing the proposed project. As a result, the proposed project is not anticipated to generate any significant adverse effects, either direct or indirect, on population growth in the district or population distribution.

XIII b-c. Because the proposed project would require equipment replacement at existing agricultural operations, the proposed project is not expected to result in the creation of any industry 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.

Conclusions

Based upon these considerations, significant population and housing impacts are not expected from the adoption of proposed Regulation 11-17. Therefore, population and housing impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XIV. PUBLIC SERVICES.

Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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?

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 and the affected environment vary greatly throughout the area. The areas affected by the proposed project are primarily located in agricultural areas throughout the Bay Area.

Given the large area covered by the BAAQMD, public services are provided by a wide variety of local agencies. Fire protection and police protection/law enforcement services within the BAAQMD are provided by various districts, organizations, and agencies. There are several school districts, private schools, and park departments within the BAAQMD. Public facilities within the BAAQMD 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.

Discussion of Impacts

XIV a. Implementation of the proposed project is anticipated to continue current agricultural operations. The proposed project is not expected to result in an increased use of hazardous materials (e.g., diesel fuel) that would require attention from fire or police departments in the event of an incident. In the event of an accident, fire departments are typically first responders for control and clean-up, and police may be need to be available to maintain perimeter boundaries. The proposed project is not expected to significantly affect fire or police departments because of the low probability of accidents that pertain to existing equipment as well as new low-use stationary diesel engines. Therefore, the proposed project is not expected to increase the demand for additional public services (e.g., fire departments, police departments, local government, etc.) above current levels.

As noted in the “Population and Housing” discussion above, the proposed project is not expected to induce population growth in any way because no construction activities are anticipated at affected agricultural operations, and operation of existing or new

equipment is not expected to require additional employees. Therefore, there will be no increase in local population and thus no impacts are expected to local schools or parks.

Conclusion

Based upon these considerations, significant public services impacts are not expected from the adoption of proposed Regulation 11-17. Therefore, public services impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XV. RECREATION.

Would the project:

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
-

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 there are numerous areas for recreational activities. The facilities affected by the proposed project are located in agricultural areas throughout the Bay Area. Public recreational land can be located adjacent to, or in reasonable proximity to these areas.

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.

Discussion of Impacts

XV a-b. As discussed under “Land Use” above, there are no provisions of the proposed project 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 project. Any required new low-use stationary diesel engines would be installed within the confines of the existing agricultural operations, so no changes in land use would be required. Further, the proposed project would not increase population growth and would not impact existing neighborhood and regional parks or other recreational facilities, or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. Therefore, no significant adverse impacts on recreation are expected.

Conclusion

Based upon these considerations, significant recreation impacts are not expected from the adoption of proposed Regulation 11-17. Therefore, recreation impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVI. TRANSPORTATION / TRAFFIC.

Would the project:

- | | | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established b the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

change in location that results in substantial safety risks?

- | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Substantially increase hazards because of a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Setting

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 contains over 19,600 miles of local streets and roads, and over 1,400 miles of state highways. In addition, there are over 9,040 transit route miles of services including rapid rail, light rail, commuter, 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 2007. The portion of commuters that carpool was about 10 percent in 2007. About 4 percent of commuters walked to work in 2007. In addition, other modes of travel (bicycle, motorcycle, etc.), account for 3 percent of commuters in 2007 (MTC, 2008). Cars, buses, and commercial vehicles travel about 145 million miles a day (2000) on the Bay Area Freeways and local roads. Transit serves about 1.6 million riders on the average weekday (MTC, 2008). The region is served by numerous interstate and U.S. freeways.

Regulatory Background

Transportation planning is usually conducted at the state and county level. Planning for interstate highways is generally done by the California Department of 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.

Discussion of Impacts

XVI a-b. No construction activities resulting from adoption of proposed Regulation 11-17 are anticipated, and would not require an increase in workers or require any substantial equipment. The proposed project is not expected to cause an increase in traffic at any agricultural operations, or require any additional employees. Therefore, traffic associated with the proposed project is not expected to exceed, either individually or cumulatively, the current level of service at any intersection. The work force at each affected agricultural operation is not expected to increase as a result of the proposed project and no increase in operation-related traffic is expected. Thus, no traffic impacts are expected due to the proposed project.

XVI c. Though some of the operations that will be affected by the proposed project may be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, actions that would be taken to comply with the proposed project (replacing existing low-use stationary diesel engines with new engines) would not influence or affect air traffic patterns. Further, the existing diesel engines would be replaced with new diesel engines of the size and type. Diesel engines are low in profile and height and would not affect navigable air space. Thus, the proposed project would not result in a change in air traffic patterns including an increase in traffic levels or a change in location of equipment that could result in safety risks.

XVI d - e. The proposed project will not result in an increase in traffic at agricultural operations. Therefore, the proposed project will not increase traffic hazards or change the design of any roadway, or result in incompatible uses. All low-use stationary diesel engine replacement will occur within the confines of the existing agricultural operations. The proposed project is not expected to alter the existing long-term circulation patterns or create long-term impacts on the traffic circulation system. The proposed project does not involve construction of any roadways, so there would be no change in a roadway design feature that could increase traffic hazards. Emergency access would not be impacted by the proposed project as no change in traffic, access, or circulation is required.

XVI f. Operational activities resulting from the proposed project are not expected to conflict with policies supporting alternative transportation since the proposed project does not involve or affect alternative transportation modes (e.g. bicycles or buses) because the operational activities related to the proposed project will occur solely in existing agricultural areas.

Conclusion

Based upon these considerations, significant transportation/traffic impacts are not expected from the adoption of proposed Regulation 11-17. Therefore, transportation/traffic impacts will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less-than- Significant Impact	No Impact
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XVII. UTILITIES / SERVICE SYSTEMS.

Would the project:

- | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Setting

Given the large area covered by the BAAQMD, public utilities are provided by a wide variety of local agencies. 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.

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.

Discussion of Impacts

XVII a, b, d and e. The proposed project would not result in the use of any additional water or an increase in any wastewater generated at agricultural operations as diesel engines do not consume water or generate wastewater. Therefore, no impacts on wastewater treatment requirements or wastewater treatment facilities are expected.

XVII c. Agricultural operations are expected to comply with the proposed project by replacing existing low-use stationary diesel engines. The proposed project does not require construction activities or will result in an increase in paved surfaces. Therefore, the proposed project would not alter existing drainage or require the construction of new storm water drainage facilities. Nor is the proposed project expected to create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. Therefore, no significant adverse impacts on storm drainage facilities are expected.

XVII f and g. The proposed project would not affect the ability of agricultural operations to comply with federal, state, and local statutes and regulations related to solid waste. No significant impacts on waste generation are expected from the proposed project, since the proposed project would replace equipment over a period of years. The proposed regulations would allow the replacement of certain low-use diesel engines equipment at the end of its life, as opposed to early retirement, so that no additional waste is expected to be generated. Waste associated with old engines is generally limited to metal and metals are usually recycled so no significant impact to land disposal facilities would be expected.

The proposed regulation would not generate any additional hazardous materials or hazardous waste from Low-use stationary diesel engines, so no significant impacts to hazardous waste disposal facilities are expected due to the proposed project. All operations 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, significant impacts to utilities and service systems are not expected from the adoption of proposed Regulation 11-17. Therefore, impacts to utilities and service systems will not be further analyzed in the EIR.

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

a) Does the project 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

XVIII MANDATORY FINDINGS OF SIGNIFICANCE

Discussion of Impacts

XVIII a. The proposed Regulation 11-17 does 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. The proposed project is expected to result in emission reductions from agricultural operations, thus providing a beneficial air quality impact and improvement in air quality. Further, equipment replacement would occur within the confines of existing agricultural operations, which have already been graded and disturbed. As discussed in Section IV, Biological Resources and Section V, Cultural Resources, no significant adverse impacts are expected to biological or cultural resources.

XVIII b-c. The proposed project is expected to result in replacement of existing low-use stationary diesel engines with new low-use stationary diesel engines. The proposed project is part of a long-term program to bring the Bay Area into compliance with the state ambient air quality standards for PM and reduce exposure to diesel particulates, a toxic air contaminant, thus reducing the potential health impacts due to PM exposure. Implementation of proposed Regulation 11, Rule 17 will delay fully achieving some emissions reductions from low use agricultural engines up to 10 – 15 years. The proposed regulation will ultimately result in greater overall emissions reductions than anticipated by the ATCM; however, during certain interim years certain specified engines will be allowed to continue operations at higher emission limits than currently allowed by the ACTM. Because of the number of agricultural engines currently in operation, the emissions reductions postponed during interim years are potentially significant and will be evaluated in the EIR.

Most, if not all, engines affected by the proposed rule are located in lightly populated areas. Engines eligible for an alternative compliance plan (ACP) under the proposed rule would operate on a very limited basis and would be located at least 200 meters from a residential area, school, or health facility. It is not anticipated that the proposed rule would result in sensitive receptors being exposed to substantial pollutant concentrations. The EIR will examine this potential impact, however, to assure that any such potential impact is considered.

Implementation of the ATCM or the proposed regulation is not expected to result in a significant increase in GHG emissions. The proposed regulation would result in the use of more Tier 4 diesel engines reducing the overall particulate matter emissions. However, additional Tier 4 diesel engines could result in a slight increase in GHG emissions if additional air pollution control equipment and/or engine design resulted in a potential loss of engine efficiency and a potential increase in GHG emissions. The potential GHG impacts will be further evaluated in the EIR.

References

- BAAQMD, 2006. Bay Area 2005 Ozone Strategy, January 4, 2006.
- BAAQMD, 2010. 2010 Clean Air Plan, September, 2010.
- BAAQMD, 2010. BAAQD Regulation 11, Rule 17, Limited Use Stationary Compression Ignition (Diesel) Engines in Agricultural Use, Workshop Report, October 2010.
- CARB, 2007. Staff Report; California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, Appendix A-1, November 16, 2007.
- CARB, 2009. "California Greenhouse Gas Inventory for 2000-2006 — Summary by IPCC Category." March 13, 2009.
http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_ipcc_00-06_sum_2009-03-13.pdf (August 24, 2009).
- Northern Sonoma County APCD, Regulation 3, Rule 8: Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines