

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

INITIAL STUDY/ENVIRONMENTAL CHECKLIST

A. PROJECT BACKGROUND INFORMATION

1. Project Title:

Amendments to the 2003 PM10 Plan

2. Lead Agency Name and Address

San Joaquin Valley Unified Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno CA 93726-0244

3. Contact Person:

Plan: Mr. Dave Mitchell, Planning Manager
(559) 230-5800

CEQA: Mr. Hector R. Guerra, Senior Air Quality Planner
(559) 230-5820

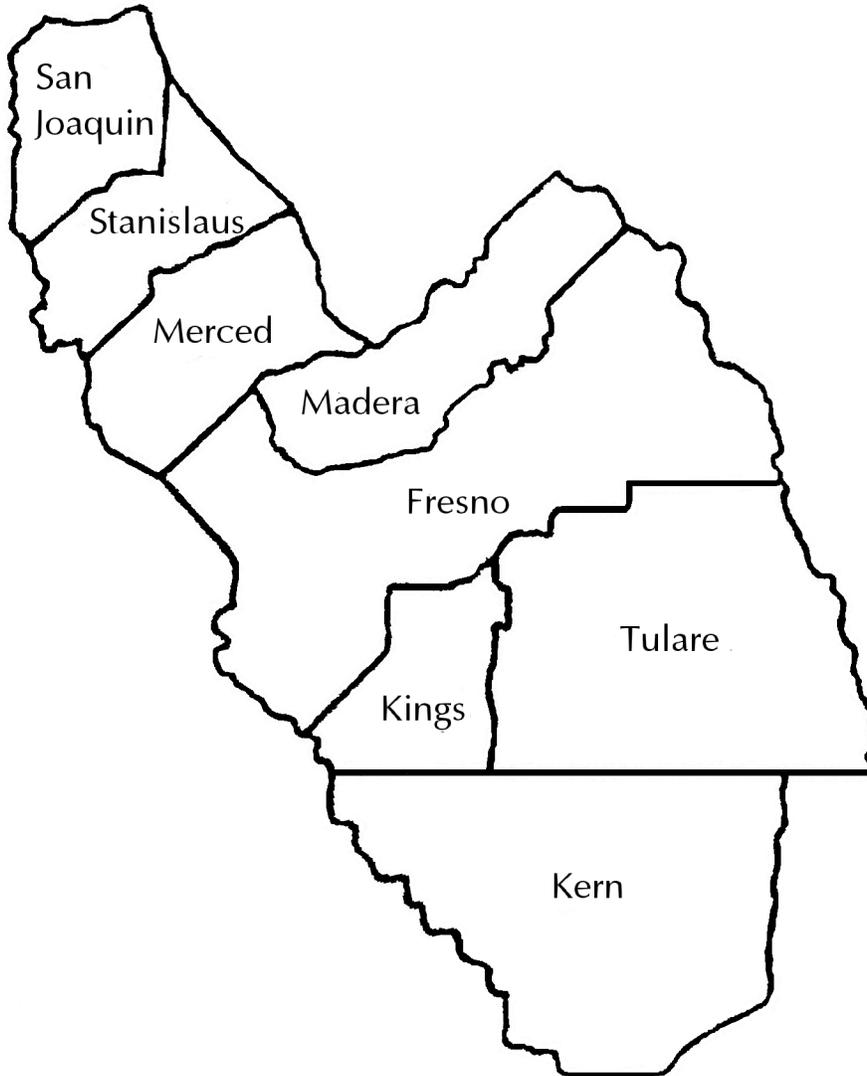
4. Project Location:

The *Amendments to the 2003 PM10 Plan* applies to PM10 emission sources located within the boundaries of the San Joaquin Valley Unified Air Pollution Control District (see Exhibit 1, Map of District Boundaries).

5. Project Sponsor's Name and Address:

San Joaquin Valley Unified Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno CA 93726-0244

Exhibit 1
San Joaquin Valley Unified air Pollution Control District Boundaries



6. Project Description

A. Background

The San Joaquin Valley Air Pollution Control District (District) 2003 PM10 Plan (Plan) is designed to meet the requirements of the federal Clean Air Act (CAA) for areas classified as serious nonattainment of the national ambient air quality standards (NAAQS) for PM10, which is measured and expressed as the amount of particles 10 microns (μm) in diameter or less contained in a cubic meter of air ($\mu\text{g}/\text{m}^3$). The District approved its 2003 PM10 Plan on June 19, 2003 and submitted it to the California Air Resources Board (ARB) for their concurrence and final submittal to United States Environmental Protection Agency (EPA). ARB approved the plan on June 26, 2003. EPA reviewed the plan and found it complete on August 22, 2003. EPA has also been reviewing the content of the plan for approvability since they received it and has identified several issues that need to be addressed to help ensure approval of the plan. The plan amendments provide the clarification and additional analysis needed by EPA to ensure approval of the plan.

Some of the issues EPA identified are the same ones that the District received as public comments during the plan development process for the 2003 PM10 Plan. These issues are primarily regarding control measure feasibility. The District planned to address these issues during the rule development process for each rule. However, since EPA has requested a plan amendment, this provides an opportunity to address some of the critical issues for EPA. Rule development for the individual rules will provide additional opportunity to address any remaining issues not covered in this plan amendment.

EPA is subject to a consent decree that requires them to promulgate a Federal Implementation Plan by March 31, 2004 unless they have approved the measures contained in the plan as best available control measures (BACM). To meet this deadline, EPA needs to have an approved amendment in hand by January 1, 2004. This makes the timing of this amendment critical and has led to the need for shorter than normal review and comment periods.

The District staff considers this a minor change to the 2003 PM10 Plan. The net effect of the changes is an overall increase in emission reductions. The District does not intend to use these emission reductions to revise the emission calculations in the plan at this time. The District does not need these emissions to demonstrate the 5 percent requirement has been met and the reductions are not enough to move the attainment

demonstration up to 2009. The District has committed to a major plan revision as part of the Reasonable Further Progress Plan that will be developed in 2005 that will account for all changes in emission reductions and for information gained from the California Regional Particulate Air Quality Study (CRPAQS).

DISTRICT PM10 PLAN CHRONOLOGY

When the 1990 amendments to the CAA were initially promulgated, the District was designated nonattainment for PM10 and was classified as a “moderate” area for PM10. The District was required to adopt a PM10 SIP by November 15, 1991. The District submitted a plan that contained reasonably available control measures (RACM) required for moderate areas, but was unable to demonstrate attainment by the moderate area deadline of December 31, 1994. This resulted in reclassification to “serious” nonattainment effective February 8, 1993.

The serious classification required the District to implement more stringent regulatory requirements as part of the SIP within 18 months after the re-classification and to demonstrate attainment of NAAQS by December 31, 2001. The District submitted a 1994 Serious Area Plan containing BACM commitments on September 13, 1994. On May 15, 1997 the District submitted a PM10 Attainment Demonstration Plan (ADP). Late in 2001, the EPA indicated that it intended to disapprove the 1997 PM10 ADP because it failed to provide an adequate BACM demonstration and a most stringent measures (MSM) demonstration. In addition, the ADP predicted attainment of the annual PM10 NAAQS by the December 31, 2001 and several monitoring sites had exceeded this standard in the previous three years.

Prior to the EPA’s final disapproval, the District withdrew its 1997 ADP in order to avoid an immediate freeze on local transportation funding that would have resulted from the disapproval of a Plan. This action led the EPA to file a “Notice of Failure to Submit the 1997 PM10 Plan” and started a CAA sanction clock that was halted when EPA found the 2003 PM10 Plan to be complete on August 22, 2003. The EPA made a final finding of failure to attain the PM10 standard on July 23, 2002 (effective August 22, 2002). This finding resulted in no additional consequences because the earlier sanction clock for failure to submit the PM10 Plan was also stopped by the completeness finding. The EPA must approve, disapprove, partially approve, or conditionally approve the plan within one year of finding the Plan complete.

B. Description of Plan Amendment

EPA has reviewed the content of the PM10 Plan adopted on June 19, 2003 and has identified several issues that need to be addressed to assure plan approval. In addition, the District received stakeholder comments regarding technical and economic feasibility issues during the plan development process that have not yet been addressed. The amendment is intended to provide the clarification and additional analysis requested by EPA and to address stakeholders concerns.

The PM10 ADP is divided into eight chapters. The specific sections of the PM10 Plan that are proposed for amendment are Chapter 4 control measure commitments for Regulation VIII- (Fugitive PM10 Prohibitions), Rule 4101 (Visible Emissions), Rule 4701 (Stationary Internal Combustion Engines), emission reduction credit (ERC) discussion in Chapter 3, and conformity trading mechanism. Additional best available control measures/technology analysis is provided to support the proposed amendment, including a BACT demonstration for the PM10 Plan. The net effect of the changes results in an equal or a small improvement in emissions reductions. The PM10 Plan and amendments will become part of the State Implementation Plan (SIP) for the San Joaquin Valley.

Chapter 3 Emissions Inventory

This chapter discusses the District's emission inventory (EI). Emission inventories are lists of all known pollutant sources for a specific area. The emission inventory is divided into source categories and subcategories. The main source categories are stationary sources (both point and aggregated), area sources, on-road mobile sources, and off-road mobile sources. Language in the Plan has been expanded as requested by US EPA to describe changes to the District's emission reduction credit banking and offset system. Additional text provides details on growth estimates, pre-baseline offset usage estimate, and safeguards to assure Plan integrity despite the use of pre-baseline credits.

Chapter 4 Control Strategy

This chapter provides background information regarding the geographical and meteorological features of the District. It discusses the District's monitoring network and the type of pollutant readings taken at the various monitoring sites, including annual and daily exceedances of the federal air quality standards. It concludes with an air quality analysis of these readings.

Amendments and clarifications have been made to the control measure commitments for Regulation VIII, the Fugitive PM10 Prohibitions. In addition, two rules will be amended to address emissions from internal combustion engines used in agricultural operations, Rule 4101 (Visible Emissions) and Rule 4702 (Stationary Internal Combustion Engines - Phase 2).

The District will remove the general exemption for agricultural equipment in Rule 4101 (Visible Emissions) section 4.4, and investigate the technical and economic feasibility of candidate control options during the rulemaking process. Rule 4702 would be expanded to cover internal combustion engines rated greater than 50 brake horsepower used in

agricultural operations. Rule 4352 will be amended to incorporate the correct definition for a major source; however, it will not be amended to strengthen emission limitations.

Rule 4702 currently controls emissions from spark-ignition stationary IC engines by requiring them to meet specific NOx emission limits while in operation. Engines used in agricultural operations in the growing of crops or raising of fowl or animals are currently exempt from Rule 4702 pursuant to a state law, which will be rescinded effective January 1, 2004. Additional NOx emissions reduction can be achieved by making such engines, as well as diesel-fueled agricultural engines, subject to NOx emission limits in Rule 4702. The emission limits and compliance schedule for agricultural engines will be developed pursuant to the requirements of SB 700 (Flores/Sher, Chaptered September 22, 2003) and will reflect the technical and economic feasibility of candidate control options.

7. Other Agencies Whose Approvals Are Required and Permits Needed:

No other agencies have discretionary authority over this project.

8. Project Compatibility with Existing Zones and Plans:

Not applicable to this project.

9. Name of Person Who Prepared Initial Study:

Hector R. Guerra
Senior Air Quality Planner

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by the proposed project, involving at least one impact that is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated", as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <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 type="checkbox"/> Mandatory Findings of Significance | |

C. DETERMINATION

I certify that this project was independently reviewed and analyzed and that this document reflects the independent judgment of the District.

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

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A **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 significant effect(s) 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, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

Signature: _____ Date: _____

Printed name: Hector R. Guerra
Title: Senior Air Quality Planner

D. ENVIRONMENTAL IMPACT CHECKLIST

Explanations of all answers on the check-off list are located in Section E.

| | Potentially Significant Impact | Potentially Significant Impact Unless Mitigated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| I. AESTHETICS Would the proposal: | | | | |
| a) Affect a scenic vista or scenic highway? | | | | X |
| b) Have a demonstrable negative aesthetic effect? | | | | X |
| c) Create light or glare? | | | | X |
| II. AGRICULTURE RESOURCES In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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? | | | | X |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | | | | X |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | | | | X |
| III. AIR QUALITY Where 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? | | | | X |
| b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? | | | | X |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? | | | | X |

| | Potentially Significant Impact | Potentially Significant Impact Unless Mitigated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| d) Expose sensitive receptors to substantial pollutant concentrations? | | | | X |
| e) Create objectionable odors affecting a substantial number of people? | | | | X |
| 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? | | | | X |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? | | | | X |
| 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, etc.) through direct removal, filling, hydrological interruption, or other means? | | | | X |
| 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? | | | | X |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | | | | X |
| 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? | | | | X |
| V. CULTURAL RESOURCES Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5? | | | | X |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5? | | | | X |

| | Potentially Significant Impact | Potentially Significant Impact Unless Mitigated | Less Than Significant Impact | No Impact |
|--|--------------------------------|---|------------------------------|-----------|
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | | | | X |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | | | | X |
| 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: | | | | X |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | | | | X |
| ii) Strong seismic ground shaking? | | | | X |
| iii) Seismic-related ground failure, including liquefaction? | | | | X |
| iv) Landslides? | | | | X |
| b) Result in substantial soil erosion or the loss of topsoil? | | | | X |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | | | | X |
| 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? | | | | X |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | | | | X |
| VII. HAZARDS & HAZARDOUS MATERIALS Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | | | | X |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions | | | | X |

| | Potentially Significant Impact | Potentially Significant Impact Unless Mitigated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-----------|
| involving the release of hazardous materials into the environment? | | | | |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | | | | X |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | | | | X |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | | | | X |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | | | | X |
| 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? | | | | X |
| VIII. HYDROLOGY/WATER QUALITY Would the project: | | | | |
| a) Violate any water quality standards or waste discharge requirements? | | | | X |
| 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 which would not support existing land uses or planned uses for which permits have been granted)? | | | | X |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in | | | | X |

| | Potentially Significant Impact | Potentially Significant Impact Unless Mitigated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-----------|
| substantial erosion or siltation on- or off-site? | | | | |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | | | | X |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | | | | X |
| f) Otherwise substantially degrade water quality? | | | | X |
| 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? | | | | X |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | | | | X |
| 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? | | | | X |
| IX. LAND USE/PLANNING Would the project: | | | | |
| a) Physically divide an established community? | | | | X |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | | | | X |
| c) Conflict with any applicable habitat conservation plan or natural community conservation plan? | | | | X |
| X. MINERAL RESOURCES Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | | | | X |
| 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? | | | | X |

XI. NOISE Would the project result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

| | Potentially Significant Impact | Potentially Significant Impact Unless Mitigated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-----------|
| | | | | |
| | | | | X |
| | | | | |
| XII. POPULATION/HOUSING Would the project: | | | | |
| | | | | X |
| | | | | X |
| | | | | X |

| | Potentially Significant Impact | Potentially Significant Impact Unless Mitigated | Less Than Significant Impact | No Impact |
|---|--------------------------------|---|------------------------------|-----------|
| county congestion management agency for designated roads or highways? | | | | |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | | X |
| d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | | | | X |
| e) Result in inadequate emergency access? | | | | X |
| f) Result in inadequate parking capacity? | | | | X |
| g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? | | | | X |
| XVI. UTILITIES/SERVICE SYSTEMS Would the project: | | | | |
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | | | | X |
| 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? | | | | X |
| 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? | | | | X |
| d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | | | | X |
| 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? | | | | X |
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | | | | X |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | | | | X |

XVII. 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?
- b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively Considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?
- c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

| Potentially Significant Impact | Potentially Significant Impact Unless Mitigated | Less Than Significant Impact | No Impact |
|--------------------------------|---|------------------------------|-----------|
| | | | |
| | | | X |
| | | | X |
| | | | X |

E. ENVIRONMENTAL IMPACT CHECKLIST COMMENTS

In addition to conducting this CEQA review for the PM10 Plan Amendments, the District conducts CEQA review on each rule during the rule development process, at which time a better idea of the methods of compliance is known. The discussion of impacts provided below reflects the general level of knowledge now available.

I. Aesthetics

Adoption of the Amendments to the 2003 PM10 Plan (PM10 Plan Amendments) would not require any changes in the physical environment that would obstruct any scenic vistas or views of interest to the public. The Plan would not create aesthetically offensive sites visible to the public. No significant adverse aesthetic or recreation impacts are expected from the Plan. *[Sources: 1, 6]*

II. Agriculture Resources

Adoption of the 2003 PM10 Plan Amendments would not lead to the conversion of prime or unique farmland to non-agricultural use. The plan will not conflict with existing zoning for agricultural use, or Williamson Act contract. *[Sources: 1, 6]*

III. Air Quality

The rules outlined in the 2003 PM10 Plan are intended to improve air quality. In some instances, air quality impacts related to Plan adoption tend to occur as secondary impacts dependent upon the control technologies that are ultimately used. For example, a control device may reduce emissions of one pollutant, but increase emissions of another. The methods of control in some cases can be reasonably foreseen because they involve expanding existing requirements to sources that were previously exempt. Those sources are likely to utilize the same control technology as sources that must currently comply with the existing requirements. District rules will involve sources not previously controlled in the San Joaquin Valley. The methods of control can be ascertained to some extent by examining the experience of other air districts that have already controlled these sources. However, the number and location of sources that will change practices due to new and amended rules is only estimated at the general level. Socio-economic analyses are conducted during rule development to more closely identify sources impacted by the rules.

Based on analysis of the reasonably foreseeable control measures included in the 2003 PM10 Plan, air quality standards will not be violated nor will the PM10 Plan Amendments significantly contribute to an existing or projected air quality violation. Any increase in exposure to sensitive receptors caused by the PM10 Plan Amendments is less than significant. No alteration of air movement, moisture, temperature, climate change or creation of objectionable odors will result from adoption of the PM10 Plan Amendments. See the individual rule section for more discussion of this impact. *[Sources: 1, 3, 4, and 6]*

IV. Biological Resources

Adoption of the PM10 Plan Amendments is not expected to adversely affect existing plant or animal species or communities, unique or endangered plant or animal species, or agricultural crops. No additional significant adverse impacts to biological resources would occur because biological resources are already disturbed on existing sites and areas where the PM10 Plan Amendments will be implemented. Further, improvements in air quality from the PM10 Plan Amendments are expected to provide health benefits to plant and animal species, as well as to humans in the District. *[Sources: 1, 6]*

V. Cultural Resources

As previously noted, any effects from implementing the strategies contained in the 2003 PM10 Plan will occur at existing sites and areas. As a result, significant impacts to cultural resources are not expected by any of the PM10 Plan Amendments because it will not require the destruction of existing buildings or sites with prehistoric, historic, archaeological, religious, or ethnic significance. Adoption of the PM10 Plan Amendments is not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources within the District. *[Sources: 1, 6]*

VI. Geology and Soils

There are no provisions in the PM10 Plan Amendments that would call for the disruption or over-covering of soil, changes in topography or surface relief features, the erosion of beach sand, or a change in existing siltation rates. Adoption of the PM10 Plan Amendments would not increase the exposure of people or property to geologic hazards, fault rupture, seismic ground shaking, seismic ground failure, seiche, tsunami or volcanic hazard. *[Sources: 1, 2, 3, and 5]*

VII. Hazard & Hazardous Materials

Although there is no risk of accidental explosion, there is a possible risk in the accidental release of hazardous substances (including, but not limited to: oil, or chemicals used for dust control used as dust suppressants). Accidental releases or spills should be minimized as applicators must comply with manufacturer specifications and must also comply with regional/state water quality control board requirements when using chemical stabilizers/suppressants. The adoption of the PM10 Plan Amendments would not interfere with an emergency response plan or an emergency evacuation plan as the District's adopted and control measures/strategies outlined in the PM 10 Plan Amendments allow exemptions for responses to emergency situations. The Regulation VIII enhancements outlined in the PM10 Plan Amendments are intended to reduce fugitive particulate emissions that will benefit public health. There is no increase in risk that will create any health hazard or potential health hazard. An existing exemption for mowing or cutting of weeds and dried vegetation related to fire prevention required by a Federal, State or local agency on a site less than one-half ($\frac{1}{2}$) acre would not be

affected by the PM10 Plan Amendments. This exemption is provided for fire prevention activities when conducted for fire management purposes. The PM10 Plan Amendments would not result in increased exposure of people to existing sources of potential health hazards or increased fire hazard in areas with flammable brush, grass, or trees. *[Sources: 1, 6]*

All chemical dust stabilizers/suppressants products applied to comply with the requirements of Regulation VIII must meet the safety criteria of the Regional Water Quality Control Board to prevent contamination of water supplies. Also, petroleum based products used for this purpose cannot contain contaminants harmful to natural resources and people. *[Sources: 1,5, and 6]*

VIII. Hydrology/Water Quality

In conjunction with Jones and Stokes Associates, District staff conducted an evaluation of the potential impacts that the November 15, 2001 amendments to Regulation VIII would have upon water supplies in the San Joaquin Valley. Based on information generated for the Regulation VIII socio-economic impact assessment and conservative assumptions on the amount of land to be treated and the volume of water required, the projected total annual water use for dust control would increase by about 500 acre-feet per year (af/yr) Valley-wide. Even if the upgrades to Regulation VIII in the PM10 Plan Amendments are implemented, water usage for dust control would, at most, increase to 1,000 af/yr based on doubling water usage. This assumption is also supported by Regulation VIII requirements that unpaved areas reaching higher usage thresholds are required to use other forms of dust control/suppressants such as chemical treatment, road oil, or paving of unpaved surfaces.

Water usage is not expected to be the only control option used in farming operations for farmers who participate in the Conservation Management Practices Program (CMP). As noted above, Regulation VIII will require using other forms of suppressants such as chemical treatment, road oil, or paving of unpaved surfaces as higher usage thresholds are reached. In addition, areas that may have a shortage of water can choose these options to watering. *[Sources: 1, 2, 3, 5, and 6]*

IX. Land Use/Planning

The Plan has no characteristics that would directly change land use, zoning or land use plans or directly affect the land use classification, or location criteria of any public or private residential, commercial, industrial, or public land use facility.

In addition, in urban areas, the expanded rules outlined in the PM10 Plan Amendments would only apply to land uses that have previously been approved by other public review agencies (i.e., city and county planning commissions, city councils, and boards of supervisors). As such, each project should have been subject to environmental review, either at the general plan level, or on a project-by project basis. Any specific impacts associated with implementation of the PM10 Plan Amendments, such as

increased water use or use of chemical suppressants, etc., would be subject to further review at the time of site specific project development.

The PM10 Plan Amendments do not propose any changes to agricultural land uses. Changes proposed for Rule 8081 will result in setting thresholds where sources with the lightest used roads and equipment areas must comply with the provisions of the Agricultural Conservation Management Practice Program and the heaviest used roads and equipment areas must comply with Rule 8081. The net effect is a slight increase in the facilities covered by the CMP Program and a small decrease in facilities covered by Rule 8081. The effect on actual implementation of dust controls is expected to be a slight decrease in application of controls compared to the 2003 PM10 Plan

There are no provisions in the PM10 Plan Amendments that would affect land use plans, policies, or regulations. It is also expected that the proposed PM10 Plan Amendments would not affect infrastructure development or require changes to existing zone designations because the 2003 Plan primarily regulates sources at existing facilities. The requirements of Regulation VIII have already been integrated into the development process and the proposed changes insignificantly impact the development process. Adoption of the PM10 Plan Amendments would not alter land use and other planning considerations or planning requirements. *[Sources: 1, 6]*

X. Mineral Resources

Adoption of the PM10 Plan Amendments would not affect the availability of any mineral resource. There are no provisions in the rules contained in the amended Plan that would either conflict with adopted energy conservation plans nor result in the use of non-renewable resources in a wasteful and inefficient manner, nor result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State.

There would also not be a substantial change in use of renewable or non-renewable resources. There may be very minor increases in the use of gasoline and diesel fuels for water and chemical application equipment and in petroleum used in manufacturing chemical suppressants, but these potential increases would be less than significant. See the individual rule section for more discussion of this impact. *[Sources: 1, 6]*

XI. Noise

Any noise resulting from adoption of the PM10 Plan Amendments would be very short-term and would be subject to local noise abatement regulations. Also, workplaces installing equipment must comply with OSHA and local noise standards. *[Sources: 1, 5, and 6]*

XII. Population/Housing

There are no provisions in the PM10 Plan Amendments that would result in the creation of any industry that would affect population growth, or directly or indirectly induce the

construction of single- or multiple-family units. No population relocation or growth inducement is expected from the amended rules implementation. See Item IX (Land Use and Planning) for additional information. *[Sources: 1, 6]*

XIII. Public Services

The adopted PM10 Plan Amendments would not result in impacts to fire and police protection services. Existing schools and park or other recreational facilities would not be impacted by the adopted PM10 Plan Amendments; however construction-related activities (i.e., excavating, leveling, trenching, etc.) for new schools and parks or, other recreational facilities, may be required to comply with fugitive dust prevention/clean-up requirements. *[Sources: 1, 6]*

XIV. Recreation

Adoption of the PM10 Plan Amendments would not adversely affect recreational facilities or resources in the District. These conclusions are based on the fact that any physical changes would occur at existing agricultural, industrial, or commercial sites and roads supporting these sites. *[Sources: 1, 6]*

XV. Transportation/Traffic

Adoption of the PM10 Plan Amendments would not result in increased vehicle trips or traffic congestion upon public paved roads, hazards to safety from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) nor will the rule conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks). *[Sources: 1, 6]*

XVI. Utilities/Service Systems

The implementation of some rules contained in the PM10 Plan Amendments may result in additional energy use. The level of increased energy use would not cause a considerable demand or increase in services. The increase in demand for natural gas would not result in substantial alterations to utility systems. Therefore, adoption of the PM10 Plan Amendments would not result in any demand for new utilities or service systems, or result in any substantial demand on existing sources. See the individual rule section for more discussion of this impact.

There are no provisions in the PM10 Plan Amendments that would affect existing communication systems, sewer or septic tanks, or regional water treatment or distribution facilities.

The PM10 Plan Amendments would not result in any demand for new utilities or service systems, or result in any substantial demand on existing sources. See Item VIII (Hydrology/Water Quality) for a discussion of potential impacts on water and public water supplies. *[Source: 6]*

XVI. Mandatory Findings of Significance

- a. The Amendments to the 2003 PM10 Plan do not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.
- b. The Amendments to the 2003 PM10 Plan do not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.
- c. The Amendments to the 2003 PM10 Plan do not have impacts which are individually limited, but cumulatively considerable.
- d. The Amendments to the 2003 PM10 Plan do not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.

F. SOURCES

1. San Joaquin Valley Unified Air Pollution Control District. *2003 PM10 Plan*, adopted September 22, 2003 and Initial Study and Final Negative Declaration for *2003 PM10 Plan*, adopted September 22, 2003.
2. San Joaquin Valley Unified Air Pollution Control District. *1994 Serious Area PM10 Plan*. September 14, 1994.
3. San Joaquin Valley Unified Air Pollution Control District. Initial Study and Final Negative Declaration for *1994 Serious Area PM10 Plan*. Adopted September 14, 1994.
4. San Joaquin Valley Unified Air Pollution Control District. Rule 4641. Adopted April 11, 1991, Amended September 19, 1991, Amended December 17, 1992.
5. San Joaquin Valley Unified Air Pollution Control District. Initial Study and Final Negative Declaration for amendments to Regulation VIII. Adopted November 15, 2001.
6. San Joaquin Valley Unified Air Pollution Control District CEQA staff: Dave Mitchell, Supervising Air Quality Planner and Hector R. Guerra, Senior Air Quality Planner.

G. CONSULTATION NOTICE FOR PREPARATION OF INITIAL STUDY
DISTRIBUTION LIST

Office of Environmental Health Hazard
Assessment
601 N. 7th Street
P.O. Box 942732
Sacramento, CA 94234-7320

Karen Yellow
Department of Conservation
1416 Ninth Street
Sacramento, CA 95814

State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Regional Water Quality Control Board
Central Valley Region
3443 Routier Road, Suite A
Sacramento, CA 95827-3098

Kim Dinh
Department of Health Services
Division of Environmental Health
P.O. Box 942732
Sacramento, CA 94234-7320

Michael J. Brady
Caltrans, District 6
P.O. Box 12616
Fresno, CA 93779

Department of Conservation
Division of Oil and Gas
801 K Street
Sacramento, CA 95814

Dana Cowell
Caltrans, District 10
P.O. Box 2048
Stockton, CA 95201

Mr. Nadell Gayou
Department of Water Resources
1416 Ninth Street, Room 449
Sacramento, CA 95814

California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814

Alice Huffaker
California Highway Patrol
Long Range Planning Section
2555 First Street
Sacramento, CA 95814

Department of Food and Agriculture
12220 "N" Street, Room 409
Sacramento, CA 95814

California Energy Commission
1516 Ninth Street
Sacramento, CA 95201

Sandy Hesnard
Caltrans Division of Aeronautics
P.O. Box 942874
Sacramento, CA 94274-0001

Department of Forestry
1416 Ninth Street, Room 1516-2
Sacramento, CA 95814

Ms. Cynthia Marvin
Air Quality & Trans. Plng. Branch
Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

Department of Fish and Game
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

John Noonan
CRWQCB - Fresno Office
3614 E. Ashland
Fresno, CA 93726

Department of Fish and Game
1234 East Shaw Avenue
Fresno, CA 93710

Dwight E. Sanders
Div. Chief/Environmental Planning
State Lands Commission
100 Howe Ave. Ste. 100 South
Sacramento, CA 95825-8502

Mr. Ronald E. Brummett
Kern COG
1401 19th Street, Suite 300
Bakersfield, CA 93301

Mr. Bill Zumwalt
KCAG
1400 W. Lacey Blvd.
Hanford, CA 93230

Mr. Doug Wilson
TCAG
County Civic Center, Room 10
Visalia, CA 93291

Mr. Jesse Brown
MCAG
1770 M Street
Merced, CA 94340

Ms. Barbara Goodwin
COFCG
2100 Tulare Street, Ste. 619
Fresno, CA 93721-2111

Ms. Julie E. Greene
SJCCOG
6 S. El Dorado Street
Stockton, CA 95202-2804

Executive Director
MCTC
1816 Howard Road, Ste. 8
Madera, CA 93637

Lark Downs
SAAG
900 "H" Street, Ste. D
Modesto, CA 95354

Dr. Ellen Hardabeck, APCO
Great Basin Unified APCD
157 Short Street, Suite 6
Bishop, CA 93514-3537

Mariposa County APCD
P.O. Box 5
Mariposa, CA 95338

Amador County APCD
665 New York Ranch Road #3
Jackson, CA 95642

Santa Barbara County APCD
26 Castilian Drive, Suite B-23
Goleta, CA 93117-3027

Tuolumne County APCD
2 South Green Street
Sonora, CA 95370-4618

Ventura County APCD
669 County Square Drive, 2nd Floor
Ventura CA, 93003-5417

Zorik Pirveysian
South Coast AQMD
Planning Division
21865 Copley Drive
Diamond Bar, CA 91765-4182

Lakmir Grewal, APCO
Calaveras County APCD
Government Center
891 Mountain Ranch Road
San Andreas, CA 95249-9709

Doug Quetin, APCO
Monterey Bay Unified APCD
24580 Silver Cloud Court
Monterey, CA 93940

Program Coordination Division
Sacramento Metropolitan AQMD
777 12th Street, 3rd Floor
Sacramento, CA 95814

Air Pollution Control Officer
San Luis Obispo County APCD
3433 Roberto Court
San Luis Obispo, CA 93401

Jean Roggenkamp
Bay Area AQMD
939 Ellis Street
San Francisco, CA 94109

Thomas Paxson, APCO
Kern County APCD
2700 "M" Street, Suite 302
Bakersfield, CA 93301-2370

59 cities within District Boundaries (Planning Directors)

Eight Counties within District Boundaries (Planning Directors)

The District conducts CEQA review on each rule during the rule development process at which time a better idea of the methods of compliance is known. The discussion of impacts provided below reflects the general level of knowledge now available.

Regulation VIII Fugitive Dust Rules. Regulation VIII is a series of rules that is aimed at reducing fugitive PM10 emissions. Sources regulated under these rules include: construction, demolition, extraction, excavation, earthmoving activities, bulk materials, landfill disposal sites, carryout and trackout, open areas, paved and unpaved roads, unpaved vehicle/equipment traffic areas, and agricultural sources. Regulation VIII was adopted in 1993 and has undergone revisions in 1994, 1996, and 2001. The Plan outlines amendments to Regulation VIII such as changes in administrative requirements (e.g., reporting requirements and dust control plans), applicability (i.e.; what sources the rules apply to), thresholds (e.g., amount of activity, such as vehicular passes per day, or size of an area where an activity occurs, or amount of material moved during an activity, etc.), and additional control options. Controlling fugitive dust sources often requires compliance with more than one Regulation VIII rule. For example, during construction activities, it is possible that earthmoving activities, handling and storage of bulk materials, use of unpaved roads, use of unpaved vehicle/equipment traffic areas, and carryout/trackout will occur. The methods of control are not likely to be different than those analyzed when Regulation VIII was last updated (November 15, 2001). Dust control methods may increase the use of water and chemical stabilizers to prevent windblown and entrained dust. A possible increase in water usage may result; however, water is not the only control option available. Therefore, no significant impacts on water usage are expected. Any chemical stabilizer must comply with state and federal requirements that prevent contamination of water supplies; therefore, no significant impacts are expected by the usage of chemical stabilizers. The revisions and clarifications to the Amendments to the 2003 PM10 Plan will not result in significant impacts.

Stationary Internal Combustion (IC) Engines (Control Measure 4701). The purpose of this control measure is to reduce NOx emissions from stationary IC engines. The number of permitted IC engines in the District is estimated to be approximately 1,700 (excluding portable engines). Due to their utility, these engines are used throughout the San Joaquin Valley in almost every industry regulated by the District. IC engines are used to power machinery for electricity generation, oil production, manufacturing, food and fiber processing, and for commercial/institutional applications. In 1996, the last year for which such data is available, approximately 62% of permitted engines were located in Kern and Tulare Counties, 19% in Fresno, Kings, and Madera Counties, and 19% in Merced, San Joaquin, and Stanislaus Counties. The District's existing Rule 4701 reduces emissions from stationary IC engines by placing NOx emissions limits on their operation. Further reductions can be achieved by increasing the stringency of NOx emission limits to meet recently adopted BARCT standards and by making the standards applicable to certain engines now exempted from the rule. It is anticipated that in some IC engines will have to install Selective Catalytic Reduction (SCR) control

systems to comply with the proposed emission limits. SCR is known to cause an increase in ammonia emissions, or ammonia slip, under some circumstances. Levels of ammonia emissions from ammonia slip are not expected to reach hazardous levels and are minimized in properly maintained equipment. The revisions and clarifications to the Amendments to the 2003 PM10 Plan will not result in significant impacts.

Emission Reduction Credit Policy. The District's emission reduction credit policy description has been expanded as requested by US EPA in the PM10 Amendments. Text has been included which provides details on growth estimates, pre-baseline offset usage estimate, and safeguards to assure Plan integrity despite the use of pre-baseline credits. The clarifications and expanded discussion in the PM10 Plan Amendments will not result in significant impacts.

Conformity Trading Mechanism. The conformity trading mechanism included in the PM10 Plan Amendments contains a discussion regarding the NO_x-PM10 ratio of 1.5-to-1.0. The US EPA requested this additional information. Also, a letter explaining the mechanism is being submitted as part of the 2003 PM10 Plan and these amendments which will be included as part of the State Implementation Plan.