

## **CHAPTER 1**

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### **INTRODUCTION AND EXECUTIVE SUMMARY**

#### Introduction

California Environmental Quality Act

Notice of Preparation/Initial Study

Type of EIR

Intended Uses of This Document

Areas of Controversy

Project Objective

Document Format

#### Executive Summary of Draft EIR

Executive Summary – Chapter 2: Project Description

Executive Summary – Chapter 3: Environmental Setting,  
Impacts and Mitigation Measures

Executive Summary – Chapter 4: Alternatives

Executive Summary – Chapter 5: Other CEQA Topics



## **1.1 INTRODUCTION**

### **1.1.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT**

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., requires that the potential environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid identified significant adverse environmental impacts of these projects be identified.

To fulfill the purpose and intent of CEQA, the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) has prepared this Environmental Impact Report (EIR) to address the potential environmental impacts associated with this Draft Extreme Ozone Attainment Demonstration Plan. Prior to making a decision on the Plan, the SJVUAPCD Governing Board must review and certify the EIR as providing adequate information on the potential adverse environmental impacts of the Extreme Ozone Attainment Demonstration Plan.

### **1.1.2 NOTICE OF PREPARATION/INITIAL STUDY**

A Notice of Preparation and Initial Study (NOP/IS) for the Extreme Ozone Attainment Demonstration Plan EIR (included as Appendix A of this EIR) were distributed to responsible agencies and interested parties for a 30-day review and comment period ending August 1, 2004. A notice of the availability of these documents was distributed to other agencies and organizations, was placed on SJVUAPCD's web site, and was also published in newspapers throughout the area of the SJVUAPCD's jurisdiction.

The Initial Study for the Extreme Ozone Attainment Demonstration Plan EIR used an environmental checklist to identify potential impacts of the proposed project. The environmental checklist used by the SJVUAPCD is that contained in Appendix G of the state Guidelines of Implementation of the California Environmental Quality Act (California Administrative Code, Title 14, Chapter 3).

The Initial Study identified potential adverse impacts in the following environmental topics: air quality and utilities and service systems (e.g., electricity, natural gas, water and solid/hazardous wastes). One comment was received on the NOP/IS which is included in Appendix B.

### **1.1.3 TYPE OF EIR**

In accordance with §15121(a) of the State CEQA Guidelines (California Administrative Code, Title 14, Division 6, Chapter 3), the purpose of an EIR is to serve as an informational document that: "will inform public agency decision-makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project."

The EIR is an informational document for use by decision-makers, public agencies and the general public. The proposed project requires discretionary approval and, therefore, it is subject to the requirements of CEQA (Public Resources Code, §21000 et seq.).

This EIR addresses both project-specific and cumulative impacts of the proposed project. The focus of this EIR is to address potentially significant adverse environmental impacts identified in the Notice of Preparation/Initial Study (NOP/IS) (see Appendix A) and to recommend feasible mitigation measures, where possible, to reduce or eliminate significant adverse environmental impacts.

The degree of specificity required in an EIR corresponds to the degree of specificity involved in the underlying activity described in the EIR (CEQA Guidelines §15146). Because the level of information regarding potential impacts from control measures recommended in the Extreme Ozone Attainment Demonstration Plan is relatively general at this time, the environmental impact forecasts are also general or qualitative in nature. In certain instances, such as future ambient air quality concentrations, impacts are quantified to the degree feasible. The SJVUAPCD conducts separate CEQA reviews for rules that are developed as a result of the control measure commitments in this plan, so further detailed review under CEQA would occur in the future.

#### **1.1.4 INTENDED USES OF THIS DOCUMENT**

In general, a CEQA document is an informational document that informs a public agency's decision-makers, and the public generally, of potentially significant adverse environmental effects of a project, identifies possible ways to avoid or minimize the significant effects, and describes reasonable alternatives to the project (CEQA Guidelines §15121). A public agency's decision-makers must consider the information in a CEQA document prior to making a decision on the project. Accordingly, this EIR is intended to: (a) provide the SJVUAPCD Governing Board and the public with information on the environmental effects of the proposed project; and, (b) be used as a tool by the SJVUAPCD Governing Board to facilitate decision making on the proposed project.

Additionally, CEQA Guidelines §15124(d)(1) requires a public agency to identify the following specific types of intended uses of a CEQA document:

1. A list of the agencies that are expected to use the EIR in their decision-making;
2. A list of permits and other approvals required to implement the project; and
3. A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

To the extent that local public agencies, such as cities, county planning commissions, etc., are responsible for making land use and planning decisions related to projects that

implement a control measure in the Extreme Ozone Attainment Demonstration Plan can tier off this EIR, pursuant to CEQA Guidelines §15152, during their decision-making process. Similarly, other single purpose public agencies developing projects consistent with the control measures in the Extreme Ozone Attainment Demonstration Plan can tier off this EIR, pursuant to CEQA Guidelines §15152. The Extreme Ozone Attainment Demonstration Plan fulfills three planning requirements: (1) an ozone attainment demonstration plan for the federal one-hour ozone standard, (2) a rate of progress plan for the rate of progress milestone years of 2008 and 2009, and (3) a California Clean Air Act Triennial Progress Report and Plan Revision. This EIR thus serves as CEQA compliance for all three components.

### **1.1.5 AREAS OF CONTROVERSY**

In accordance to CEQA Guidelines §15123(b)(2), the areas of controversy known to the lead agency including issues raised by agencies and the public shall be identified in the EIR. No substantial areas of controversy have been raised on the Extreme Ozone Attainment Demonstration Plan. A comment received on the NOP/IS raised concerns about transport of air pollutants to other air basins and the potential for upwind nitrogen oxide (NO<sub>x</sub>) reductions to result in downwind ozone increases. Appendix B provides a response to these comments; in addition, these issues have been addressed herein under Transport of Air Pollutants and the “Weekend Effect” in Chapter 3.

### **1.1.6 PROJECT OBJECTIVES**

CEQA Guidelines §15124(b) requires an EIR to include a statement of objectives, which describes the underlying purpose of the proposed project. The purpose of the statement of objectives is to aid the lead agency in identifying alternatives and the decision-makers in preparing a statement of findings and a statement of overriding considerations, if necessary. The objectives of the proposed Extreme Ozone Attainment Demonstration Plan are summarized in the following bullet points.

- Comply with the California Clean Air Act requirements including:
  1. Apply best available retrofit control technology (BARCT);
  2. Reduce ozone concentration and its precursors (nitrogen oxides and volatile organic compounds) at a rate of five percent per year, or if this cannot be done, include all feasible measures and an expeditious implementation schedule;
  3. Reduce population exposure to ozone according to a prescribed schedule;
  4. If a transporting district, include all feasible measures to reduce transport;
- Comply with the federal Clean Air Act which includes:
  1. Specific emission reduction goals;
  2. Demonstration of reasonable further progress and attainment of federal ambient air quality standards by specified dates;

3. Attain or meet specified interim milestones; and
  4. Provide for attainment of the federal one-hour standard by 2010.
- Rely on the latest modeling techniques for attainment demonstration relative to ozone.

### **1.1.7 DOCUMENT FORMAT**

State CEQA Guidelines outline the information required in an EIR, but allow the format of the document to vary [CEQA Guidelines §15120(a)]. The information in the EIR complies with CEQA Guidelines §15122 through §15131 and consists of the following:

Chapter 1: Introduction

Chapter 2: Project Description

Chapter 3: Environmental Setting, Impacts and Mitigation Measures

Chapter 4: Alternatives

Chapter 5: Other CEQA Topics

Chapter 6: References

Chapter 7: Acronyms

Appendix A: Notice of Preparation/Initial Study

Appendix B: Comments Received on the Notice of Preparation (NOP)/Initial Study

Appendix C: Detailed Information on Solid Waste Landfills

## **1.2 EXECUTIVE SUMMARY OF DRAFT EIR**

### **1.2.1 EXECUTIVE SUMMARY – CHAPTER 2: PROJECT DESCRIPTION**

Implementation of the Extreme Ozone Attainment Demonstration Plan strategies requires a cooperative partnership of governmental agencies at the federal, state, regional and local level. At the federal level, the U.S. Environmental Protection Agency (U.S. EPA) is charged with regulation of on-road motor vehicle standards; trains, airplanes, and ships; certain non-road engines; and off-shore oil development. The California Air Resources Board (CARB) also oversees on-road emission standards, fuel specifications, some off-road sources, and consumer product standards. At the regional level, the SJVUAPCD is

responsible for stationary sources and some mobile sources. In addition, the SJVUAPCD has primary responsibility for the development of the Extreme Ozone Attainment Demonstration Plan. Furthermore, at the local level, the San Joaquin Valley is a single air quality nonattainment area containing eight Metropolitan Planning Organizations (MPOs), which are also regional transportation planning agencies (RTPAs or TPAs) within the Valley, that have adopted measures to reduce emissions from transportation-related sources.

Chapter 2 describes existing air quality regulations and details the proposed approach for the Extreme Ozone Attainment Demonstration Plan.

As a result of the previously Amended 2002 and 2005 Ozone Rate of Progress Plan (Ozone ROP) (SJVUAPCD, 2003c) and the 2003 PM10 Plan (PM10 Plan) (SJVUAPCD, 2003d), the District is already committed to develop a number of control measures in the form of new or amended rules. The control measures in the Ozone ROP are designed to reduce emissions of ozone precursors: NO<sub>x</sub> and volatile organic compounds (VOC). During the winter months, these pollutants are also sources of secondary particulate matter less than 10 microns in diameter (PM<sub>10</sub>), so the PM<sub>10</sub> Plan includes control measures for NO<sub>x</sub> and VOC. The SJVUAPCD has proposed 21 control measures for implementation between with 2004-2007 as part of the Extreme Ozone Attainment Demonstration Plan.

The SJVUAPCD has identified 11 control measures that may be feasible but require further study. Assuming controls are feasible and emission reductions are significant, rule development activity for these categories would most likely not occur until 2006 or later. These projects would address categories for which adequate emission inventories are not currently available or for which emission control strategies must be further researched and developed.

A number of potential non-traditional mobile source emission control measures have also been identified for future study. The SJVUAPCD will investigate the feasibility of additional programs that reduce emissions from mobile sources. These measures would address sources commonly outside District jurisdiction, and thus would necessitate teaming with other agencies that have more direct authority over these sources. Several special programs have been suggested that could reduce mobile source emissions, including: (1) additional funding to enforce truck speed limits along Highway 99; (2) roadside inspections to identify gross polluters; (3) designating Interstate 5 as the sole truck route through the Valley, reducing truck traffic on Highway 99; (4) encourage vehicle owners to either make repairs or remove the dirtiest vehicles on the road; (5) evaluate the feasibility of installing electricity for auxiliary power units at truck stops; and (6) adjusting vehicle license fee and registration fees for the age of the vehicle.

The SJVUAPCD is currently operating two (2) programs aimed at reducing ozone precursor emissions: the Heavy-Duty Engine Emission Reduction Incentive Program (Heavy-Duty Program) and the Electric Lawnmower Incentives Program. Continued operation of these programs is included in the Plan. The Mobile Source Emission

Reduction Incentive Program (MSIP) is the most developed of the future programs. Although not yet approved by the Governing Board as of July 2004, MSIP provides incentives for specific projects that will reduce motor vehicle emissions within the District. Principal MSIP components include the Light- and Medium-Duty Vehicle Component, the E-Mobility (Telecommunications) Component, the Bicycle Infrastructure Component, the Public Transportation and Commuter Vanpool Subsidy Component, and the Alternative Fuel Vehicle Mechanic Training Component.

To provide additional statewide emission reductions needed to achieve the federal health-based air quality standards, CARB adopted the 2003 State and Federal Strategy for the California State Implementation Plan (Statewide Strategy) on October 23, 2003. CARB staff estimates that the near-term measures in the Statewide Strategy will provide 15 tons per day (tpd) VOCs and 20 tons per day NO<sub>x</sub> reduction in the San Joaquin Valley in 2010. CARB previously committed to achieve 10 tpd of new NO<sub>x</sub> reductions as part of the Valley PM<sub>10</sub> SIP, which is a subset of the 20 tpd NO<sub>x</sub> discussed here.

## **1.2.2 EXECUTIVE SUMMARY – CHAPTER 3: ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES**

Pursuant to CEQA Guidelines §15125, Chapter 3 – Existing Environmental Setting of the EIR, includes descriptions of existing environment only for those environmental areas that could be adversely affected by the proposed project. Based on the NOP/IS, the proposed project could have potentially significant impacts on air quality and utilities and service systems.

This section also summarizes the environmental impacts, mitigation measures, and residual impacts associated with the proposed project. Impacts are divided into four classifications: Unavoidable Adverse Impacts, Potentially Significant but Mitigable Impacts, Less Than Significant Impacts, and Beneficial Impacts. Unavoidable adverse impacts are significant impacts that require a Statement of Findings pursuant to CEQA Guidelines §15091 and a Statement of Overriding Considerations to be issued per CEQA Guidelines §15093 if the project is approved. Potentially Significant but Mitigable Impacts are adverse impacts that can be feasibly mitigated to less than significant levels. CEQA Guidelines §15091 is interpreted to require findings only if impacts are significant. If an impact is mitigated to insignificance, findings are not required. Less than significant impacts may be adverse but do not exceed any significance threshold levels and do not require mitigation measures. Beneficial impacts reduce existing environmental problems or hazards.

### **1.2.2.1 AIR QUALITY**

#### **1.2.2.1.1 Environmental Setting**

The San Joaquin Valley Air Basin (SJVAB) currently exceeds the one-hour federal ozone standard. The number of days that the SJVAB exceeds the standard has decreased

basin-wide from a peak of over 70 in the late 1980's to a level of 37 in 2003. However, short-term trends show an increase in the number of days over the standard basin-wide: from below 30 days in 1999 to 37 in 2003. A similar trend is observed for the Southern Region. Northern and Central Regions show a downward trend in this time frame. It should be noted that for the first seven months in calendar year 2004, the SJVAB has recorded only one exceedance of the federal one-hour ozone standard (based on preliminary data). In 2000, PM10 and carbon monoxide (CO) concentrations did not exceed the federal standards in the SJVAB.

#### **1.2.2.1.2 Environmental Impacts and Mitigation Measures**

The potential secondary air quality impacts associated with implementation of the control measures identified in the Extreme Ozone Attainment Demonstration Plan were evaluated. Potential secondary air quality impacts are associated with: (1) increased electricity demand; (2) control of stationary sources; (3) change in use of VOCs; (4) construction impacts; (5) miscellaneous sources; (6) mobile sources; (7) transport of air pollutants; (8) non-criteria pollutants; and (9) cumulative impacts. Examples of secondary air quality impacts include emissions from control equipment (such as afterburners), potential additional emissions from electric power generating equipment because of projected increases in demand for electricity. Every control measure in the Extreme Ozone Attainment Demonstration Plan was evaluated for potential effects on air quality, grouped together into categories and then evaluated for their potential to create significant adverse air quality impacts. To determine whether air quality impacts for adopting and implementing the Extreme Ozone Attainment Demonstration Plan as a whole are significant, impacts are evaluated and compared to significance criteria. The analysis of secondary air quality impacts indicated that potentially significant impacts could be expected from cumulative impacts related to toxic air contaminants. Mitigation measures were provided for this potentially significant impact.

The objective of the Extreme Ozone Attainment Demonstration Plan is to attain or maintain all state and federal ozone air quality standards. Based upon the modeling analyses described in Chapter 3.2.2.4.5 Future Ambient Air Quality/Attainment Demonstration of this document, implementation of all control measures contained in the Plan is anticipated to bring the District into compliance with the federal one-hour ozone standards by the year 2010. Thus, potential cumulative air quality effects for criteria air pollutants due to the proposed control measures are not considered significant.

#### **1.2.2.2 UTILITIES AND SERVICE SYSTEMS**

##### **1.2.2.2.1 Environmental Setting**

In-state, power plants supply most of California's electricity demand, while hydroelectric power plants from the Pacific Northwest, and power plants in the southwestern U.S., provide California's out-of-state needs. The largest power plants in the Basin are located in Kern County. These plants consume natural gas, and provide over 2100 megawatts

(MW) of electricity. Additionally, a 750 MW facility is under construction in Kern County, and is scheduled to open in the summer of 2005. Pacific Gas and Electric Company (PG&E) is the largest electricity utility in the Basin, with a service area that covers all, or nearly all, of Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare counties. Local electricity distribution service is provided to customers within the SJVUAPCD primarily by the privately-owned utility PG&E.

Four regions supply California with natural gas. Three of them—the Southwestern U.S., the Rocky Mountains, and Canada—supply 85 percent of all the natural gas consumed in California. The remainder is produced in California. In 2000, approximately 35 percent of all the natural gas consumed in California was used to generate electricity. Residential consumption represented approximately one-fourth of California’s natural gas use with the balance consumed by the industrial, resource extraction, and commercial sectors. PG&E provides natural gas service throughout the Basin (CEC, 2002a). Energy Commission staff expects that PG&E will need to expand its pipeline capacity to access Canadian supplies by 2013 to meet the projected natural gas demand (CEC, 2003a).

The SJVAB lies within two of California’s Hydrologic Regions, the San Joaquin River and Tulare Lake Hydrologic Regions. The area included in the San Joaquin Hydrologic Region encompasses 15,214 square miles (9.6 percent of California). The average rainfall in this section of the state is 26.3 inches. The total irrigated agricultural land in the area is 1,964,500 acres, while the total reservoir storage capacity is 11,477 thousand acre feet (CDWR, 2004). The area included in the Tulare Lake Hydrologic Region encompasses 17,033 square miles (10.7 percent of California). The average rainfall in this section of the state is 26.3 inches. The total irrigated agricultural land in the area is 3,083,000 acres, while the total reservoir storage capacity is 2,046 total acre feet (CDWR, 2004).

A total of 28 Class III active landfills are located within the District with a total capacity of 31,448 tons per day. There are two hazardous waste (Class I) facilities in California, with a total estimated capacity of about 18 million cubic yards. Hazardous waste also can be transported to permitted facilities outside of California.

#### **1.2.2.2.2 Environmental Impacts and Mitigation Measures**

The potential impacts on utilities and service systems have been divided into separate sections to discuss the potentially significant impacts on: (1) energy (electricity, natural gas, petroleum fuels and alternative fuels); (2) water demand; and (3) solid/hazardous wastes.

The electric energy impacts from the implementation of the control measures in the Extreme Ozone Attainment Demonstration Plan are expected to be less than significant. The electric energy impacts represent a conservative estimate of electric energy demand and peak demand impacts. The analysis conservatively includes increases in electricity demand due to the use of add-on controls from coating and solvent control measures. It is expected based on current practices that reformulated products will be used to meet

future VOC emission reductions from these control measures. Add-on controls will be used only if they are cost effective.

Control measures in the Extreme Ozone Attainment Demonstration Plan will result in an increase in natural gas associated with use as alternative fuels, with add-on controls, and indirectly for utility electric generators as the demand for electricity (e.g., for electric vehicles and the electrification of diesel engines) increases. The natural gas impacts from the implementation of the Plan are expected to be less than significant. Sufficient natural gas resources are available without the need for new or substantially altered natural gas systems.

Implementation of the Extreme Ozone Attainment Demonstration Plan is expected to result in a larger decrease in the use of petroleum fuels than an increase in petroleum fuel use, resulting in less demand on the use of petroleum fuels. Therefore, implementation of the Plan is not expected to result in a significant impact on petroleum fuel use.

Although the Extreme Ozone Attainment Demonstration Plan may result in an increase in alternative transportation fuels, this increase is not expected to be significant since alternative fuels (e.g., natural gas and hydrogen) are available or the feedstock that produces the fuels are generally available. Future demand could be met through increased production. The energy impacts associated with the future use of alternative fuels are expected to be less than the current strategy that uses predominately petroleum-based fuels so that no significant impacts on alternative fuels are expected.

Implementation of the Extreme Ozone Attainment Demonstration Plan may result in an increase in the amount of water used. The potential water demand is expected to be within the capacity of water supplied from the San Joaquin River and the Tulare Lake Hydrologic Regions (about 22,985 acre feet per year or about  $1.72 \times 10^{14}$  gallons) and is not considered significant compared with current and projected future demand and supply. While there are projected drought-year shortages in some regions of California, these shortages would occur regardless of the proposed control measures. Therefore, no significant water demand impacts are expected.

The potential impacts to the generation of solid and hazardous waste associated with the implementation of the Plan include an increase in: (1) solid waste due to air pollution control technologies; (2) carbon adsorption; (3) particulate traps, prefilters, filters and HEPA filters; (4) early retirement of equipment; and (5) reject low VOC content coatings. The increased amount of solid/hazardous waste generated is minor and expected to be within the capacity of the landfills. Therefore, no significant impacts due to solid/hazardous wastes are expected.

### **1.2.3 EXECUTIVE SUMMARY – CHAPTER 4: ALTERNATIVES**

The alternatives evaluated in the EIR are discussed in the following paragraphs.

### **1.2.3.1 No Project Alternative**

Under the No Project Alternative, no additional air pollution control measures would be implemented in the SJVUAPCD, other than those already approved as part of the Amended 2002 and 2005 Rate of Progress Plan for San Joaquin Valley Ozone and the 2003 PM10 Plan, state measures, and measures required by other mandates. Implementation of the No Project Alternative would not result in demonstrating attainment of the federal one-hour ozone standard. Therefore, this alternative would result in significant adverse air quality impacts by not achieving sufficient ozone precursor emissions reductions needed to attain the federal one-hour ozone standard.

### **1.2.3.2 Early 8-Hour Reasonable Further Progress Report Alternative**

Under this alternative, the SJVUAPCD would prepare an early 8-hour Reasonable Further Progress Plan and submit it to U.S. EPA by June 15, 2005. Because this plan would largely depend upon emission reductions from control measures in the Amended 2002 and 2005 Rate of Progress Plan for San Joaquin Valley Ozone and in the 2003 PM10 Plan to show a five percent emission reduction over the period 2002 to 2007, it would have some of the same effects as “No Project”, except for the beneficial and adverse impacts from implementing a Federal Implementation Plan (FIP) and sanctions. Fewer secondary air quality impacts would be expected under the Early 8-Hour Reasonable Further Progress Plan alternative than the proposed project because fewer control measures would be needed to meet the less stringent five percent per year requirement. This alternative would have the adverse ozone air quality impact of not reducing ozone precursor emissions to the extent needed to attain the federal one-hour ozone standard. It is expected that the air quality impacts associated with Alternative 2 would be less than significant because of the generally strict air pollution control laws that apply to sources that would be controlled. Implementation of Alternative 2 would be expected to show progress towards complying with the 8-hour ozone standard and would ultimately help demonstrate compliance with the 8-hour standard.

### **1.2.3.3 Alternative 3 – Early 8-Hour Attainment Demonstration Plan**

Under Alternative 3, additional control measures over and above those identified in the Extreme Ozone Attainment Demonstration Plan would be required. Therefore, additional energy in the form of electricity and natural gas would likely be required. At this time, the emissions reductions needed in the SJVAB to attain the federal 8-hour ozone standard are not known, but are likely to be substantially more than those contained in the Extreme Ozone Attainment Demonstration Plan. It is expected that this alternative would require additional mobile source control measures and potentially generate significant increases in electricity and natural gas use due to increase in electrification of sources or use of alternative fuels. This not a feasible alternative because the SJVUAPCD cannot demonstrate attainment of the federal 8-hour ozone standard with control measures identified to date, and because the SJVUAPCD cannot develop and submit an approvable plan through CARB to U.S. EPA by the June 15, 2005 deadline.

#### **1.2.3.4 Summary Comparison**

Overall, the Proposed Project is superior because only the Proposed Project and Alternative 2 are feasible, and because the air quality benefits of the Proposed Project (demonstrated attainment of the federal 1-hour ozone standard) outweigh any negative impacts of additional control measures, none of which were found to be significant.

### **1.2.4 EXECUTIVE SUMMARY – CHAPTER 5: OTHER CEQA TOPICS**

#### **1.2.4.1 Relationship Between Short-term Uses and Long-Term Productivity**

Implementing the Extreme Ozone Attainment Demonstration Plan is not expected to achieve short-term goals at the expense of long-term environmental productivity or goal achievement. The purpose of the Plan is to set forth a comprehensive control program that will lead the SJVAB into compliance with the federal one-hour ozone standard. By the standard, the Extreme Ozone Attainment Demonstration Plan is expected to enhance short and long-term environmental productivity in the region.

#### **1.2.4.2 Significant Irreversible Environmental Changes**

Implementation of the Extreme Ozone Attainment Demonstration Plan is not anticipated to result in any significant irreversible adverse environmental changes. The Plan would place only an incremental demand on nonrenewable and limited resources, such as energy and water supplies, relative to the accelerated rate of use of these resources due to population growth and increased consumer demand. The largely irretrievable conversion of undeveloped/agricultural land to urban uses is a function of the growing population and local land use authority, not the Extreme Ozone Attainment Demonstration Plan. The Extreme Ozone Attainment Demonstration Plan is expected to result in long-term benefits associated with improved air quality.

#### **1.2.4.3 Growth-Inducing Impacts**

Growth-inducing impacts can generally be characterized in three ways: (1) a project includes sufficient urban infrastructure to result in development pressure being placed on less developed adjacent areas; (2) a large project affects the surrounding community by producing a “multiplier effect,” which results in additional community growth; and (3) a new type of development is allowed in an area, which subsequently establishes a precedent for additional development of a similar character. None of the above scenarios characterize the project evaluated in the EIR.

**TABLE 1-1**

**Extreme Ozone Attainment Demonstration Plan Control Measure Analysis**

Control Meas. No.	Rule No.	Control Measure Description	Pollutant	Not Significant	Control Measure	Potential Impact <sup>8</sup>			
						Second. Air	Energy	Water	Solid/Haz. Waste
<b>SJVUAPCD 2004-2006 Control Measures</b>									
A	4409	Oil and Gas Fugitives	VOC	1,3	Lowering the current leak threshold, eliminating exemptions, improving inspections and repair programs and replacing leaking components with BACT				
B	4455	Refinery & Chemical Fugitives	VOC	1,3	Lower leak thresholds, require more frequent inspections and shorter periods to repair leaking components.				
C	9310	Fleet Rule – School Buses	NOx	6	Replacing existing buses, replacing older engines, retrofitting emission controls, use cleaner-burning diesel or alternate fuels	X	X		X
D	9510 3180	Indirect Source Mitigation	NOx	5	Require onsite mitigation of new development projects or contributions to mitigation fund				
E	4307	Small Boilers, Process Heaters, Steam Generators, 2.0 - 5.0 MMBtu/hr	NOx	6	Combustion modifications include low excess air, low NOx burners, water/steam injection, flue gas recirculation, selective catalytic reduction, and selective non-catalytic reduction	X	X	X	X

TABLE 1-1 (cont.)

Extreme Ozone Attainment Demonstration Plan Control Measure Analysis

Control Meas. No.	Rule No.	Control Measure Description	Pollutant	Not Significant	Control Measure	Potential Impact <sup>8</sup>			
						Second. Air	Energy	Water	Solid/Haz. Waste
F	4694	Wineries – Fermentation and Storage	VOC	6	Use of vapor collection and control systems, carbon adsorption, water scrubbers, catalytic incineration, condensation and temperature control	X	X	X	X
G	4352	Solid-Fuel Boilers, Steam Generators, and Process Heaters	NOx	6	Low excess air, low NOx burners, SNCR, SCR and thermal de-NOx	X	X		X
H	4702	Stationary IC Engines	NOx	6	Use electric motors, replace old engines, retrofit older engines with add-on control devices, use cleaner-burning diesel or alternate fuels	X	X		X
I	4309	Commercial Dryers	NOx	6	Use of natural gas, excess air controllers, low NOx burners, and flue gas recirculation	X	X		
J	4565	Composting/Biosolids Operations	VOC	6	Vapor collection and control systems, forced aeration, and windrow of material	X	X		X
K	4602	Automotive Coating	VOC	7	VOC limits, application equipment, and add-on control devices	X	X	X	X
L	4570	Concentrated Animal Feeding Operations	VOC	6	Removal and disposal of livestock wastes	X	X		X

**TABLE 1-1 (Continued)**

**Extreme Ozone Attainment Demonstration Plan Control Measure Analysis**

Control Meas. No.	Rule No.	Control Measure Description	Pollutant	Not Significant	Control Measure	Potential Impact <sup>8</sup>			
						Second. Air	Energy	Water	Solid/Haz. Waste
M	4662 4663 4602 4603 4604 4605 4606 4607 4653 4684	Organic Solvent Degreasing Organic Solvent Cleaning Motor Vehicle and Mobile Equipment Coating Surface Coating of Metal Parts and Products Can and Coil Coating Operations Aerospace Assemblies and Component Coating Wood Products Coating Graphic Arts Adhesives Polyester Resin Operations	VOC	7	VOC limits, application equipment, and add-on control devices	X	X		X
N	New	Water Heaters, 0.075 - 2.0 MMBtu/hr (See Note 3)	NOx	6	Low NOx burners, SNCR, SCR, and Thermal De-NOx	X			X
O	4401	Steam-Enhanced Oil Well Vents	VOC	6	Additional VOC vapor recovery systems	X	X		
P	4651	Soil Decontamination (See Note 3)	NOx VOC	6	Thermal destruction, biofiltration beds, carbon adsorption, condensation, and burial in sealed drums or in impermeable landfills	X	X		X
Q	4103	Open Burning	NOx VOC	6	Phase out open burning	X	X		X

TABLE 1-1 (Continued)

Extreme Ozone Attainment Demonstration Plan Control Measure Analysis

Control Meas. No.	Rule No.	Control Measure Description	Pollutant	Not Significant	Control Measure	Potential Impact <sup>8</sup>			
						Second. Air	Energy	Water	Solid/Haz. Waste
R	4682	Polymeric Foam Manufacturing	VOC	6	Alternative, non-VOC blowing agent, add-on controls	X	X		X
S	4703	Stationary Gas Turbines (< 10 MW, distributed generation) (See Note 2)	NOx	6	Use water or steam injection, low NOx burners, SCR, or some combination of these technologies	X	X	X	X
T	4621, 4624	Gasoline Storage & Transfer	VOC	3	Increased inspection and maintenance frequencies, tank seal repair or replacement, retrofit of old equipment				
U	New	Aviation Fuel Transfer, Phase I	VOC	6	Pressure-vacuum relief valves on storage tanks, submerged fill tubes to reduce splashing, vapor recovery destruction systems	X	X		X
<b>SJVUAPCD Control Measures Requiring Further Study</b>									
A	2280	Portable Equipment	NOx	6	Diesel oxidation catalyst, catalyzed diesel particulate filters, early retirement of older portable engines	X	X		X
B	New	Asphalt Plant Dryers/Heaters	NOx, VOC	6	Use clean fuel and low NOx burners for the heaters, capture and controls for blue smoke emissions and catalytic particulate filters		X		X
C	4402, 4625	Sumps, Pits, and Wastewater Processing Equipment	VOC	6	Additional VOC Control Measures	X	X		X

**TABLE 1-1 (Continued)**

**Extreme Ozone Attainment Demonstration Plan Control Measure Analysis**

Control Meas. No.	Rule No.	Control Measure Description	Pollutant	Not Significant	Control Measure	Potential Impact <sup>8</sup>			
						Second. Air	Energy	Water	Solid/Haz. Waste
D	New	Fugitive Emissions – Heavy Oil Stream	VOC	2,3	Establish leak thresholds, create inspection and repair programs and replace leaking components with BACT				
E	4653	Adhesives	VOC	6	VOC limits, application equipment, and add-on control devices	X	X		X
F	4607	Graphic Arts	VOC	6	VOC limits on coating material, solvent VOC limits, allowable application equipment, evaporative loss minimization practices, and add-on controls	X	X		X
G	4641	Cutback Asphalt Application	VOC	6	Close-fitting lids on kettles, controlled operating temperatures, and after burners	X	X		X
H	4607	Restaurants, Under-fired Charbroilers	VOC	6	Add on control equipment, equipment modification, (e.g., Smokeless broiler, grease extraction hoods, electrostatic precipitator or water scrubber, adsorption filter system or afterburner, catalyst filters)	X	X		X
I	4902	Residential Water Heaters	NOx, VOC	1	Reduce allowable NOx limits for new heaters				

TABLE 1-1 (Continued)

Extreme Ozone Attainment Demonstration Plan Control Measure Analysis

Control Meas. No.	Rule No.	Control Measure Description	Pollutant	Not Significant	Control Measure	Potential Impact <sup>8</sup>			
						Second. Air	Energy	Water	Solid/Haz. Waste
J	New	Furnaces	NOx	6	Clean burning fuel, low NOx burners, catalytic filters	X	X		X
K	New	Brandy Production	VOC	6	Use of vapor collection and control systems, carbon adsorption, water scrubbers, catalytic incineration, condensation, and additional temperature control	X	X		X
<b>SJVUAPCD Future Study Measures</b>									
		Funding for Additional CHP Enforcement along Highway 99	NOx VOC	4	Develop funding for special CHP patrols along Hwy 99 to enforce truck speed limits				
		Increased Heavy-Duty Vehicle Inspections along Hwy 99 and Interstate 5	NOx VOC	4	Increase funding for roadside inspections				
		Designating Hwy 99 as a "No Through Truck Route"	NOx VOC	4	Prohibit through truck traffic on Hwy 99 and consolidate traffic on I-5				
		Incentives for Repair or Replacement of Gross Polluters	NOx VOC	4	Offer incentives for the repair and replacement of gross polluters				
		Auxiliary Power Systems at Truck Stops	NOx VOC	4	Provide auxiliary power units, thermal storage systems, and truck stop electrification				

**TABLE 1-1 (Continued)**

**Extreme Ozone Attainment Demonstration Plan Control Measure Analysis**

Control Meas. No.	Rule No.	Control Measure Description	Pollutant	Not Significant	Control Measure	Potential Impact <sup>8</sup>			
						Second. Air	Energy	Water	Solid/Haz. Waste
		Adjust Vehicle License and Registration Fees	NO <sub>x</sub> VOC	4	Adjust license and registration fees based on emissions				
<b>SJVUAPCD INCENTIVE PROGRAMS</b>									
		Heavy-Duty Engine Emission Reduction Incentive Program		6	Allocate funds to projects that have the greatest motor vehicle emission reductions (e.g., telecommunications, bicycle infrastructure)	X	X		X
		Electric Lawnmower Incentives		6	Exchange old lawnmowers for new electric lawnmowers	X	X		
		Mobile Source Emission Reduction Incentive Programs		1	Provides funding for new purchases, engine re-powering or retrofits.	X	X		X

1. Control technologies do not generate adverse impacts.
2. Changes in operating practices with no impact identified.
3. Changes in testing, inspection, or enforcement procedures with no impact identified.
4. Impacts are considered to be speculative.
5. Impacts determined to be less than significant in NOP/IS (see Appendix A).
6. Based on review in this document, impacts determined to be less than significant.
7. The cumulative impacts associated with toxic air contaminants from these and other control measures were determined to be potentially significant. However, mitigation measures were imposed to reduce the impacts to less than significant.
8. These columns were completed for only for those control measures evaluated in this document (i.e., reason for not significant = 6 or 7). See Tables 3.2-5, 3.3-7, 3.3-10 3.3-11, 3.3-13 for further details.

