SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

INITIAL STUDY

A. PROJECT BACKGROUND INFORMATION

1. Project Title:

Draft 2002 And 2005 Rate of Progress 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:

Mr. Tom Jordan (559) 230-5800

4. **Project Location:**

The project applies to all areas 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

6. Description of Project:

In December 2001, the reclassification of the San Joaquin Valley Air Basin (SJVAB) to severe nonattainment for the One-Hour Ozone National Ambient Air Quality Standard became final. The reclassification resulted from the failure of the SJVAB to attain the Standard by November 15, 1999 as required for serious nonattainment areas. Under the severe classification, the District is required to prepare plans which demonstrate attainment of the standard by November 15, 2005 and rate of progress plans (ROP)s that demonstrate that ozone precursors are reduced at a rate of three percent per year, averaged over three year periods. This plan fulfills the ROP requirement for 2002 and 2005. This plan does not address the requirement that the District demonstrate attainment of the standard.

The FCAA requires that the District and other agencies having jurisdiction over sources within the SJVAB adopt reasonably available control measures (RACM) as expeditiously

as practical. Therefore, in this ROP, the District commits to a rulemaking schedule through 2003 and addresses issues raised by EPA in its rulemaking on the San Joaquin ozone standard. The 8 Valley Transportation Agencies, California Department of Transportation, and the 59 cities and 8 counties also committed to RACM that are included in the plan. The proposed measures are considered to be reasonably available control measures for the 2002-2003 period that the plan covers.

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

No other agencies have discretionary authority over this project.

8. **Project Compatibility with Existing Zones and Plans:**

Adoption of this plan will not affect any land use zones or plans.

9. Name of Person Who Prepared Initial Study:

Thomas E. Jordan, Senior Air Quality Planner

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

Aesthetics	Agriculture Resources	Air Quality
Biological Resources	Cultural Resources	Geology /Soils
Hazards & Hazardous Materials	Hydrology / Water Quality	Land Use / Planning
Mineral Resources	Noise	Population / Housing
Public Services	Recreation	Transportation/Traffic
Utilities / Service Systems		

Mandatory Findings of Significance:

On the basis of this initial evaluation:

- 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 revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

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

Signature

Date

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS Would the project:				
a) Have a substantial adverse effect on a scenic vista?				\boxtimes
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				\boxtimes
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				\boxtimes
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?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
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?				
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:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				\boxtimes
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)?				
d) Expose sensitive receptors to substantial pollutant concentrations?				\boxtimes
e) Create objectionable odors affecting a substantial number of people?				\boxtimes
IV. BIOLOGICAL RESOURCES Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				
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?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				\boxtimes
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?				
V. CULTURAL RESOURCES Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				\boxtimes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				\boxtimes
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				\boxtimes
d) Disturb any human remains, including those interred outside of formal cemeteries?				\boxtimes
VI. GEOLOGY AND SOILS Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				\boxtimes
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?				\boxtimes
iii) Seismic-related ground failure, including liquefaction?				\boxtimes

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
iv) Landslides?				\boxtimes
b) Result in substantial soil erosion or the loss of topsoil?				\bowtie
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?				
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?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
VII. HAZARDS AND HAZARDOUS MATERIALS B Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				\boxtimes
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			\boxtimes	
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?				
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				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
project area?				
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?				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
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?				
VIII. HYDROLOGY AND WATER QUALITY Would the project:				
a) Violate any water quality standards or waste discharge requirements?				\boxtimes
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)?				
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 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?				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide				\boxtimes

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
substantial additional sources of polluted runoff?				
f) Otherwise substantially degrade water quality?				\boxtimes
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?				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				
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?				
j) Inundation by seiche, tsunami, or mudflow?				\boxtimes
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?				\boxtimes
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?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				\square
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?				
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?				\boxtimes

XI. NOISE B Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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?				\boxtimes
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				\boxtimes
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				\boxtimes
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				\square
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?				
XII. POPULATION AND HOUSING Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes

XIII. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?		\boxtimes
Police protection?		\boxtimes
Schools?		\boxtimes
Parks?		\boxtimes
Other public facilities?		\boxtimes
XIV. RECREATION		
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?		
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?		
XV. TRANSPORTATION/TRAFFIC Would the project:		
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?		\boxtimes
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in safety risk?		

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

e) Result in inadequate emergency access?

f) Result in inadequate parking capacity?

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

XVI. UTILITIES AND SERVICE SYSTEMS B Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

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?

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?

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

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?

f) Be served by a landfill with sufficient permitted capacity to accommodate the project=s solid waste disposal needs?

g) Comply with federal, state, and local statutes and regulations related to solid waste?

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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)?

 \boxtimes

 \boxtimes

 \boxtimes

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

E. ENVIRONMENTAL IMPACT CHECKLIST COMMENTS

I. Aesthetics

The 2002 and 2005 ROP Plan will not result in the obstruction of any scenic vista or view open to the public, or create an aesthetically offensive site that is open to the public view.

II. Agricultural Resources

The 2002 and 2005 ROP Plan will 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.

III. Air Quality

The rules outlined in the 2002 and 2005 ROP Plan are adopted in order to improve air quality. Air quality impacts related to plan adoption tend to be secondary impacts of using control technologies. 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. Other

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.

The purpose of this plan update is to reduce criteria pollutant emissions. This will have a positive impact on air emissions. Consequently, ambient levels of ozone, carbon monoxide (CO), and fine particulate matter (PM-10) will decrease.

Based on analysis of the reasonably foreseeable control measures included in the 2002 and 2005 ROP Plan, the plan will not violate any air quality standards or significantly contribute to an existing or projected air quality violation. Any increase in exposure to sensitive receptors caused by the plan is less than significant. No alteration of air movement, moisture, or temperature, or climate change will result from adoption of the plan. See the individual rule section at the end of the initial study for more discussion of this impact.

IV. Biological Impacts

Adoption of the 2002 and 2005 ROP Plan is not expected to negatively impact plant life. The 2002 and 2005 ROP Plan should not result in increased soil erosion, surface runoff, changes in drainage patterns, or alterations of the earth surface. Therefore, plant life should not be negatively affected either directly or indirectly by implementation of the project. Ozone reduction will have a positive effect on plant growth.

Adoption of the 2002 and 2005 ROP Plan is not expected to impact animal life or habitat. It should not result in increased soil erosion, surface runoff, changes in drainage patterns, or alterations of the earth's surface. Therefore, animal life and animal habitat should not be impacted by implementation of the project.

V. Cultural Resources

The 2002 and 2005 ROP Plan will not impact any known cultural resources

VI. Geologic Problems

The implementation of the rules outlined in the 2002 and 2005 ROP Plan would not increase any risk or problems related to the region's geology. The proposed plan will not result in the disruption of soil, the erosion of soils, or changes in topography. The proposed project will not increase the exposure of people or property to geologic hazards

VII. Hazards

The 2002 and 2005 ROP Plan will not result in a significant increase in the risk of upset. See the individual rule section for more discussion of this impact. Some rules may

require the use of hazardous materials such as ammonia as part of the pollution control technology. These hazards are minimized through compliance with existing regulations.

VIII. Hydrology and Water Quality

Adoption of the 2002 and 2005 ROP Plan will not significantly impact the currents or course of water flow, nor will the project result in changes in absorption rates, drainage patterns or the rate and amount of surface runoff. The project will not result in significant changes in the amount or quality of surface water or groundwater. See the individual rule section for more discussion of this impact.

IX. Land Use and Planning

The 2002 and 2005 ROP Plan will not result in any changes in land use, zoning or land use plans. It will not affect the land use classification, or location criteria of any public or private residential, commercial, industrial, or public use facility.

X. Mineral Resources

There will be no substantial change in the availability or use of renewable or nonrenewable resources as a result of the proposed project. See the individual rule section for more discussion of this impact

XI. Noise

Adoption of the 2002 and 2005 ROP Plan is not expected to cause significant noise impacts. Workplaces installing equipment must comply with OSHA and local noise standards.

XII. Population and Housing

The 2002 and 2005 ROP Plan will not result in the significant relocation of individuals, impact housing, or change the distribution of population. Implementation of the proposed project will not attract or induce population growth. No effects are expected on existing housing. The proposed project will not require or induce any additional housing.

XIII. Public Services

No significant impact on public services is anticipated.

XIV. Recreation

The 2002 and 2005 ROP Plan will not impact recreational opportunities.

XV. Transportation/Traffic

Implementation of the 2002 and 2005 ROP Plan will not lead to any significant changes in transportation/traffic.

XVI. Utilities and Service Systems

The implementation of some rules may result in additional energy use. The level of increased energy use will not cause a considerable demand or increase in services. The increase in demand for natural gas will not result in substantial alterations to utility systems. Therefore, the proposed project will 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.

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

Discussion of potential impacts of individual rules:

Control measures that were identified as being potential reasonably available control measures (RACM) for the San Joaquin Valley were evaluated, using their baseline inventories, known control technology, potential emission reductions, cost effectiveness, and the feasibility of implementation by 2005. Based upon this evaluation, they were placed in three tiers. Tier 1 measures were identified as being RACM for 2002 and 2003 and included in the rule development schedule for development during the period covered by the plan.

Control measures that may be feasible for adoption and implementation between 2004 and 2010 or which require further research and evaluation to determine their potential for emission reductions were placed in Tier 2. These control measures are not District commitments, but will be evaluated as RACM in the next planning round. Tier 3 Control measures with small baseline inventories that would be the least effective in achieving significant emission reductions in an expeditious manner. These control measures will be further evaluated and either eliminated as potential control measures or placed in Tier 2 in the next planning round. Tier 3 measures, thus are also not District commitments in this ROP.

In addition to the RACM measures (8 in total), the District's 2002-2003 rulemaking schedule includes 12 other measures. These include 5 Reasonably Available Control Technology (RACT) rules that are required as a result of the change in the definition of major source due to the

severe area classification; 5 Sanction Clock/Fix up rules which are clean up actions to existing rules required by EPA, 1 Best Available Control Measures/Fix up rule, and one rule required by the Federal Clean Air Act related to the bump-up.

The District's understanding of the federal RACT requirement is that it is intended to assure at least a minimum level of control technology in equipment at major sources. Because of the bump-up of the SJVAB from serious to severe nonattainment, the definition of major source changed from sources that emit 50 tons per year (tpy) of a criteria pollutant to those which emit 25 tpy. District staff has reviewed the permits and emissions inventory databases to assess the scope of the project and found that the sources which will be affected by the lower major source threshold include bakery ovens, flares, kilns, nitric acid plants, and plastic, rubber & glass coating operations.

Although the District must adopt RACT rules for these sources, no negative impacts are anticipated. First, many permit conditions for these sources are already as restrictive as RACT requirements will be. Secondly, many of these sources are currently permitted to emit more than 25 tpy, but in actually emit less than this threshold. It is expected that some of the sources fitting into this category will request new permits at limits below 25 tpy to avoid meeting federal requirements for major sources. Thus few changes in equipment or operation will actually occur.

The five sanction clock/fix up rules (Glass Melting Furnaces; Gasoline Transfer; Boilers, Steam Generators and Process Heaters (RACT); Gasoline Transfer; Boilers, Steam Generators and Process Heaters; and Internal Combustion Engines are already adopted and implemented. The required amendments will not significantly affect the equipment being used or the operation of the equipment. Thus no negative impacts are anticipated.

The BACM/Fix-up rule (Residential Wood Burning) is included in the rulemaking schedule in the ROP but was previously included in the District's PM10 Attainment Demonstration Plan and was evaluated for environmental impacts as part of that process. No significant impacts were identified. No changes have occurred in the environment of the San Joaquin Valley subsequently that would invalidate that finding.

Finally, Rule 3170, Fee Rule, would require major sources to pay a fee if the San Joaquin Valley fails to reach attainment in 2005. Under the California Environmental Quality Act, fee rules are exempt from CEQA.

The 8 RACM rules on the District's 2002-2003 rulemaking schedule are described below. For many of the RACM rules included in the 20002 and 2005 ROP

For many of the rules included in the 2002 and 2005 ROP Plan, only the general method of compliance or a range of compliance options is known. Therefore, identifying specific impacts of including new or amended rules in the plan would be speculative in some cases. At the plan level, the District must analyze reasonably foreseeable impacts of adopting the plan. 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.

Chain-driven Charbroilers (Control Measure 4692)

Commercial charbroiling includes the operation of direct meat firing grills (charbroilers) at restaurants and fast food facilities. Emissions from this source category include organic gases (mainly aldehydes) and particulate matter (fat, grease, and carbon) that result from the melting and incomplete combustion of fat during charbroiling of meats. Findings from studies completed

by the University of California Riverside, College of Engineering, Center for Environmental Research and Technology (CE-CERT) indicate that the type of food cooked and the type of appliance used greatly influence the emissions.

Control Measure 4692 would apply only to chain-driven (conveyorized) charbroilers. It also may have a belt to carry buns through the appliance. Flames broil the meat on the top and bottom simultaneously. Most chain-driven charbroilers burn natural gas. This appliance is more feasible for control than under-fired charbroilers. This control measure would require operators of chain driven charbroilers to install a flameless catalytic oxidizer to control VOC and PM10 emissions from new and existing chain driven charbroilers.

Stationary Gas Turbines (Control Measure 4703)

Control Measure 4703 would reduce NOx emissions from stationary gas turbines. A stationary gas turbine is a large internal combustion engine, similar to a jet engine. Existing turbines in the San Joaquin Valley generally employ water or steam injection, dry low-NOx combustion technology, or selective catalytic reduction, or some combination thereof, to control NOx emissions. Stationary gas turbines are used in oil production and refining, food processing, petroleum transportation, irrigation district water pumping and power generation.

Because of their use, stationary gas turbines are located throughout the District. Approximately 100 turbines would be affected by the rule.

The control measure would lower measured concentration emissions compliance limits of NOx and CO for stationary gas turbines with different limits set for turbines rated at >0.3 MW but <10.0 MW, and for turbines > 10.0 MW.

It is anticipated that some turbines 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.

Public Agency Fleets (Control Measure 9011)

Control Measure 9011 would reduce NOx emissions from heavy-duty public fleets. Public agencies have a substantial number of heavy-duty trucks that provide public services of all types. Based on the numbers of vehicles subject to South Coast Air Quality Management District (SCAQMD) fleet rules that were adopted in year 2000 and assuming the same ratio of vehicles per person in the San Joaquin Valley, approximately 2,600 heavy-duty trucks would be subject to the rule. Examples include dump trucks, road maintenance trucks, refuse haulers, and street sweepers.

The rule would require all government agencies located in the District operating heavy-duty vehicles to acquire vehicles equipped with engines certified to ARB's optional low-NOx standard and that achieve substantial reductions in diesel particulate emissions. As an option to obtain more and earlier emission reductions, the fleets could be required to retrofit their vehicles with exhaust aftertreatment devices or to repower their existing vehicles with cleaner engines on a phased schedule. This requirement would be in addition to the new purchase requirements. The rule could also apply to private fleets providing contracted services to government agencies such as refuse haulers.

These technologies will all be certified for sale in California by the California Air Resources Board. Alternative fuel vehicles and storage tanks are required to meet state and federal safety standards and are not expected to cause a significant risk of upset.

Oil and Gas Fugitives (Control Measure 4403)

Control Measure 4403 would reduce fugitive VOC emissions from crude oil and gas production operations and natural gas processing plants. The operation of crude oil and gas production and processing facilities requires a large number and types of components such as flanges, fittings, connectors, pressure relief valves, pumps, and compressors. Leakage of fluids or gases from these components can be expected to occur during process and transfer operations, causing the production of fugitive VOC emissions.

The California Department of Oil, Gas, and Geothermal Resources Report shows approximately 105 oil and/or gas production fields in the San Joaquin Valley. The District's permit database indicates eight permitted natural gas processing plants. The actual percentage of leaking components for most of these facilities is small. Due to the large number of components used at such facilities, however, the VOC emissions resulting from the leaking components is significant.

Possible controls include lowering the gaseous leak threshold of 10,000 ppmv. eliminating some existing exemptions, improving the existing inspection and repair programs by increasing the frequency of inspection and shortening the repair period for leaking components and replacing frequently leaking components with leakless hardware technology.

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.

Glycol Reboilers (Control Measure 4408)

The purpose of Control Measure 4408 is to reduce VOC emissions from glycol reboilers. Glycol reboilers are used in natural gas processing operations, during the natural gas dehydration process. The incomplete combustion of the fuel by the burner in a glycol reboiler is the primary

source of the VOC emissions. This control measure would limit emissions by requiring recirculation of the burner flue gas. No significant adverse impacts expected from this rule.

Boilers, Steam Generators and Process Heaters (Control Measure 4305)

Control Measure 4305 is intended to reduce NO_x emissions and to prevent any increase in carbon monoxide (CO) emissions from boilers, process heaters, and steam generators. The measure would affect any new or existing boiler, steam generator, and/or process heater with a rated heat input capacity greater than 2 million Btu per hour. Facilities with units that are subject to this control measure represent a wide range of industries, including but not limited to, medical facilities, educational institutions, office buildings, prisons, military facilities, hotels, and industrial facilities, including agricultural processing facilities. Many units that are subject to this control measure are already required by the District to have permits to operate.

Due to the diversity of industries, units in this source category may be located throughout the eight (8) county area of the SJVAB. Based on population and job-base, there may be more units located in urban and suburban settings.

Combustion modifications appropriate for small boilers, steam generators, and process heaters include low excess air, low NO_x burners, water/steam injection, and flue gas recirculation (FGR). Post-combustion controls can include the use of selective catalytic reduction (SCR) or selective non-catalytic reduction (SNCR) treatment of the exhaust stream.

It is anticipated that in some boilers, steam generators, and process heaters 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. No significant impact is expected.

Can and Coil Coatings (Control Measure 4604)

This control measure would reduce VOC emissions from the coating of can and coil products. Can and coil coatings are predominantly used to coat metallic parts such as metal cans, drums, pails, or lids and to the surfaces of flat metal sheets, strips, rolls, or coils produced in manufacturing operations.

Can and coil coating operations in this source category are present in both urban and suburban settings in the San Joaquin Valley Air Basin and emit uniformly throughout the year. Rule 4604 currently regulates can and coil coating operations that use more than three (3) gallons of coatings per day. The rule requires operators to achieve emission limits by using low VOC coatings or by using any other emission control process with a minimum of 90% VOC control efficiency. The VOC content limits vary based upon the product and process involved.

This type of control measure usually results in the use of coatings that are less toxic than the original high VOC coatings. When the rule development process goes forward and potential substitute coatings are identified this issue will be reexamined for potential impacts.