3.1. AIR QUALITY

3.1.1. INTRODUCTION

This section analyzes the potential impacts the proposed project would have on air quality. This section is based on the project's *Air Quality Impact Analysis* prepared by Giroux and Associates in May 2006. The project's *Air Quality Impact Analysis* is included in this EIR as Appendix B. Appendix B also contains the following reports/journal articles that make a correlation between air quality and human health: 1) *The Health Effects of Air Pollution on Children* (South Coast Air Quality Management District, 2000); 2) *Ambient Air Pollution and Atherosclerosis in Los Angeles* (Zunzli et al., 2005); 3) *Association of Low-Level Ozone and Fire Particles with Respiratory Symptoms in Children with Asthma* (Gent et al., 2003); and 4) *Lung Cancer, Cardiopulmonary Mortality, and Long-term Exposure to Fine Particulate Air Pollution* (Pope et al., 2002).

3.1.2. ENVIRONMENTAL SETTING

Meteorology/Climate

The climate of San Joaquin County, as with all of California, is dominated by the strength and position of semi-permanent high-pressure cell over the Pacific Ocean north of Hawaii. In summer, when the high-pressure cell is strongest and farthest north, temperatures are hot and humidity is low, but persistent afternoon and evening breezes somewhat help to moderate the summer heat. In winter, when the high is weakest and farthest south, weather patterns are more changeable as occasional storms are interspersed with protracted periods of stagnant, fair weather conditions.

Temperatures at the project site average 59°F annually with a moderate to strong seasonal oscillation. Summer afternoon's average in the low 90's while winter nights are generally in the upper 30's. Although a maximum of 108 degrees and a minimum down to 21 degrees have been observed in Lodi, extremes of temperature are somewhat moderated by the proximity of the Pacific Ocean. About 70 days per year exceed 90 degrees, while about 35 days drop to just below freezing.

The annual rainfall as measured in Lodi, which falls almost exclusively from late October to early May, totals 16.3 inches per year, but varies significantly from year to year. Measurable rain falls on about 34 days per year but only 11 of those days have moderate rainfall of more than 0.5 inches in 24 hours.

Winds across San Joaquin County show a number of distinct patterns depending on the driving mechanism and the topographical steering of both the Delta and the Central Valley axis. The dominant winds across Lodi are from west to east from the strong marine air inflow from the cool Bay Area to the warm Central Valley. They turn toward the southeast across Lodi as they head up the San Joaquin Valley. Winds are dominantly from the W-NW, except during occasional periods of poorly disorganized valley winds when the cross-valley component is dominant. During summer, the onshore flow from ocean to land creates a strong inflow into the San Joaquin River

Valley that may bring air pollution into San Joaquin County from the Bay Area. During winter storms, the Valley topography also funnels the winds with a dominant and well-organized flow again from the NW. Between the winter storms, winds are often light with weak downvalley flow from the east or southeast toward the Delta.

The net effect of the observed wind patterns is that daytime mixing in the project area, especially in summer, is generally good. Any observed air pollution effects of local emissions sources tend to occur many miles away from the source in response to prevailing wind patterns. At night, especially in winter, the near calm winds tend to localize the impact from any emissions sources. Winter air quality patterns tend therefore to be dominated by micro-scale dispersion processes with generally good air quality except in very close proximity to freeways, parking lots or highly congested intersections. In the absence of any significant development in the Lodi area, the limited dispersion potential from the weak nocturnal winds is probably not a significant air quality issue except for possible agricultural activity emissions stagnation.

In addition to prevailing wind patterns that control the rate of dispersal and trajectory of local pollutant emissions, the San Joaquin Valley Air Basin (SJVAB) experiences two types of inversions that affect the vertical depth through which pollutants can be mixed. In summer, air within the high pressure cell over the region warms by compression as it sinks. The resulting warm layer aloft creates a lid over the region until surface heating late in the day finally destroys this subsidence inversion. These inversions contribute to summer photochemical smog problems by confining pollution to a shallow layer between ground surface and the inversion base aloft.

At night, especially in winter, the air near the ground cools by radiative processes, while the air aloft remains warm. Surface-based radiation inversions are formed that, in conjunction with nearly calm winds, cause localized air pollution “hot spots” to be created near emissions sources because of the very poor winter nocturnal dispersive capacity. These inversions burn off after sunrise, but are a factor in contributing to elevated nocturnal primary (unreacted) automotive air pollution levels such as carbon monoxide (CO). While the subsidence and radiation inversions are present throughout much of the year, they are much less dominant than on summer afternoons and winter nights, respectively. Their decreased importance during the spring and fall transitional periods leads to generally good air quality during these seasons.

Baseline Air Quality

San Joaquin Valley air quality primarily results from a combination or stagnant atmospheric ventilation, intense sunshine to drive photochemical reactions, and continuing growth/ urbanization. While agricultural activities continue to contribute to particulate emissions, much of the summer haze is due to ozone (smog). Motor vehicles generate 57 percent of smog precursors, with off-road vehicles, consumer products and small utility equipment adding another 20 percent (source of data: www.Valleyair.org/newsed/apvalley.htm). The contribution of pollutants from outside the air basin is most pronounced near the gap in the Coast Range in the San Joaquin/Sacramento Delta. With continuing emissions improvements in the Bay Area,

the smog transport problem into San Joaquin County is much less severe than what it was 10-20 years ago.

The combination of limited dispersive capacity and growth contribute to the continuing non-attainment status[1] of the basin for several pollutants. Ozone and small-diameter particulates exceed standards by a substantial margin. While the South Coast (Los Angeles) Air Basin (SCAB) continues to have the poorest air quality in California, the gap between the San Joaquin Valley Air Basin (SJVAB) and the SCAB has been steadily narrowing. Whereas improvement over the last two decades has been pronounced in the SCAB, it has been only minimal in the SJVAB. Smog levels are almost identical downwind of Fresno or Bakersfield as they are in much of Los Angeles County.

Existing levels of ambient air quality and historical trends and projections in the project area are well documented from measurements made by the San Joaquin Valley Air Pollution Control District (SJVAPCD) in several locations in San Joaquin County. The most complete air monitoring measurements closest to the project site are made in Stockton. From this data one can infer that baseline air quality levels near the project site are occasionally unhealthy, but that such violations of clean air standards usually affect only those people most sensitive to air pollution exposure. Table 3.1.1 summarizes the monitoring history from the Stockton monitoring station for the last 5 years.

As reflected in the data in Table 3.1.1, the standards for ozone and for particulate matter (PM-10) are routinely exceeded near the project site, as they are throughout the air basin. The SJVAB is designated as a “non-attainment” air basin by state and federal agencies as shown in Table 3.1.2.

[1] The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) designate those air basins that exceed ambient air quality standards as “non-attainment”. Ambient air quality standards are discussed in Section 3.1.3 of this EIR.

TABLE 3.1.1: AIR QUALITY MONITORING SUMMARY
(Days Standards Were Exceeded and Maximum Observed Concentrations)

Pollutant/Standard	2000	2001	2002	2003	2004
Ozone					
1-hour > 0.09 ppm (S)	4	5	2	3	1
1-hour > 0.12 ppm (F)	0	0	0	0	0
8-hour > 0.09 ppm	0	1	0	1	0
Max 1-hour Conc. (ppm)	0.107	0.103	0.102	0.104	0.096
Carbon Monoxide					
1-hour > 20. ppm (S)	0	0	0	0	0
8- Hour > 9. ppm (S,F)	0	0	0	0	0
Max 1-hour Conc. (ppm)	6.5	8.4	6.0	5.8	3.7
Max 8-hour Conc. (ppm)	3.9	6.0	3.2	3.1	2.5
Nitrogen Dioxide					
1-hour > 0.25 ppm (S)	0	0	0	0	0
Max 1-hour Conc. (ppm)	0.099	0.084	0.076	0.088	0.079
Respirable Particulates (PM-10)					
24-Hour > 50 $\mu g/m^3$ (S)	9/61	11/63	10/64	3/62	3/61
24-Hour > 150 $\mu g/m^3$ (F)	0/61	0/63	0/64	0/62	0/61
Max. 24-Hr. Conc. ($\mu g/m^3$)	97.	147.	91.	90.	61.
Ultra-Fine Particulates (PM-2.5)					
24-Hour > 65 $\mu g/m^3$ (F)	1/123	2/123	0/124	0/123	0/122
Max. 24-Hour Conc. ($\mu g/m^3$)	78.	76.	64.	45.	41.

(S) - State ambient standard; (F) - Federal ambient standard

Data from Stockton (Hazelton) Air Monitoring Summary,
Source: California Air Resources Board, PTSD-06-021-CD, 2006

TABLE 3.1.2
SAN JOAQUIN VALLEY AIR BASIN ATTAINMENT STATUS

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – 1 Hour	Non-attainment/Extreme	Non-attainment/Severe
Ozone – 8 Hour	Non-attainment/Serious	No State Standard*
PM-10 – 24 Hour	Non-attainment/Serious	Non-attainment
PM 2.5 – 24 Hour	Unclassified**	No State Standard
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead Particulates	No Designation	Attainment
Other Pollutants (H_2S, SO_4, visibility)	No Federal Standards	Attainment or Unclassified

* State standard goes into effect in 2006, basin will be non-attainment.
** To be determined, but likely non-attainment.

However, Stockton (and, by inference Lodi) has not recorded any violations of the federal one-hour ozone standard in the last five years. The federal 8-hour ozone standard was exceeded only twice in five years. No more than three violations of federal standards in three years is considered as “attainment” under federal guidelines. Although the air basin as a whole is considered in “serious non-attainment” for the 8-hour ozone standard, the project area has considerably better ozone air quality than the rest of the air basin.

Table 3.1.2 includes data for PM-2.5. PM-2.5 monitoring was begun in 1999 following adoption of a federal standard in 1997. Based upon available PM-2.5 measurements the basin will be designated as “non-attainment” for the federal annual and 24-hour standards. PM-2.5 is different from more ordinary “dust” in that very little of PM-2.5 is created by the mechanical breakdown of larger particles. PM-2.5 is created mainly as a combustion byproduct (soot), or from chemical growth of microscopic materials. Health effects from elevated PM-2.5 exposure are believed to be more severe than from PM-10. Table 3.1.2 shows that although San Joaquin County experiences frequent violations of PM-10 standards from agricultural activities, very few violations of the PM-2.5 standard have been observed in the last five years because agricultural dust does not break down readily into PM-2.5.

More localized pollutants such as carbon monoxide, nitrogen oxides, etc. are low near the project site because background levels, never exceed allowable levels. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants such as NOx or CO without any threat of violating applicable regulations.

3.1.3. REGULATORY FRAMEWORK

Ambient Air Quality Standards (AAQS)

In order to gauge the significance of the air quality impacts of the proposed Reynolds Ranch project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These ambient air quality standards, which are identified in Table 3.1.3, are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Research suggests, however, that long-term exposure to air pollution at or above these standards may lead to chronic adverse health effects. Just meeting standards may not provide a sufficient health protection cushion for sensitive receptor populations.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. Because California had established AAQS several years

before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 3.1.3. A description of source and effects of those air pollutants with clean air standards is shown in Table 3.1.4. A more detailed description of the potential health affects of air pollution is provided in the South Coast Air Quality Management District's publication *The Health Effects of Air Pollution on Children* contained in Appendix B of this EIR; and the additional medical journal articles contained in Appendix B show a correlation between certain air pollutants and human health.

Table 3.1.3 includes those federal clean air standards that were adopted in 1997. These standards included a chronic (8-hour) exposure limit for ozone and a standard for ultra-small diameter particulate matter of 2.5 microns of less (called PM-2.5). EPA's authority to promulgate clean air standards without a specific congressional mandate, and without a comparison of costs to air quality benefits, was challenged in a series of court cases that culminated in the U.S. Supreme Court agreeing to hear the appeal in November, 2000. On February 27, 2001, the U.S. Supreme Court, in a unanimous decision, overturned the previously issued stay of implementation of the federal standards for ozone (8 hours) and ultra-fine particulate matter (PM-2.5). The Court ruled that EPA did not require specific congressional authorization for this action, nor did it have to consider the cost-benefit ratio of the action. However, the Court did find that the proposed implementation schedule for these standards was inconsistent. That inconsistency has since been resolved.

In addition to a variety of pollutants with ambient air quality standards (called "criteria pollutants"), air quality considerations may include pollutants which have no safe level of exposure (toxic or hazardous air contaminants), "normal" air constituents present in variable quantities (carbon dioxide, methane, water vapor), precursors to the pollutants (ammonia, chloride, sulfates, nitrates, etc, which form particulate matter), and nuisance pollutants such as odors or large dust particles that soil property.

TABLE 3.1.3: AMBIENT AIR QUALITY STANDARDS

Pollutant	Average Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O_3)	1 Hour	0.09 gpm (180 ug/m3)	Ultraviolet Photometry	0.12 ppm (235 ug/m3)	Same as Primary Std.	Ultraviolet Photometry
	8 hour	0.07 ppm (137 ug/m3)		0.08 ppm (157ug/m3)		
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m3)	Non-dispersive Infrared Spectroscopy (NDIR)	9 ppm (10 mg/m3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)		-	-	-
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	-	Gas Phase Chemiluminscence	0.053 ppm (100 ug/m3)	Same as Primary Std.	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 ug/m3)		-		
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm (80 ug/m3)	-	Spectrophotometry (Pararosonanine Method)
	24 Hour	0.04 ppm (105 ug/m3)		0.14 ppm (365 ug/m3)	-	
	3 Hour	-		-	0.5 ppm (1300 ug/m3)	
	1 Hour	0.25 ppm (656 ug/m3)		-	-	
Respirable Particulate Matter (PM_{10})	24 Hour	50 ug/m3	Gravimetric or Beta Attenuation	150 ug/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 ug/m3		50 ug/m3		
Fine Particulate Matter (PM_{25})	24 Hour	No Separate State Standard		65 ug/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 ug/m3	Gravimetric or Beta Attenuation	15 ug/m3		
Sulfates	24 Hour	25 ug/m3	Ion Chromatography	-	-	-
Lead	30-Day Average	1.5 ug/m3	Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 ug/m3	Same as Primary Standard	
Hydrogen Sulfide	1 Hour	0.03 ppm (42 ug/m3)	Ultraviolet Fluorescence	-	-	-
Vinyl Chloride (chloroethene)	24 Hours	0.01 ppm (26 ug/m3)	Gas Chromatography	-	-	-
Visibility Reducing Particles	8 Hours (10 am to 5 pm PST)	Expansion coefficient of 0.23 per kilometer visibility of 10 miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		-	-	-

TABLE 3.1.4: HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of menial function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor Vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_X, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Air Quality Management Planning

The San Joaquin Valley Air Pollution Control District (SJVAPCD) has jurisdiction over air quality matters in the SJVAB. The SJVAPCD was formed in 1991. The air district is responsible for air quality programs in San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and a portion of Kern County. The SJVAPCD has a large number of air quality responsibilities. For many years its primary role was in the control of stationary sources of air pollution. More recent legislation at the state and federal levels increased local air district responsibilities to implement transportation control measures (TCM's). The SJVAPCD also coordinates its air quality planning and improvement efforts with various councils/associations of governments, transportation planning agencies, as well as with economic development or trade associations to maximize the benefit and minimize the impact of air pollution improvement efforts.

The San Joaquin Valley has been designated as a non-attainment air basin by the EPA and the California Air Resources Board (ARB) for ozone and fine particulate matter. In response to state and federal clean air legislation, the SVJAPCD is required to prepare and adopt air quality attainment plans on a prescribed schedule. The attainment planning process has generated multiple state-mandated plans, which include: four federal ozone plans, three federal PM-10 plans and one federal CO plan since 1991.

The most significant and controversial air quality planning issue has focused on the 1-hour ozone standard. It become obvious several years ago that the basin could not demonstrate an adequate rate-of-progress to meet the 1-hour standard within the timetable required for a "severe" non-attainment area. A downgrade to an "extreme" non-attainment area was requested and granted that shifts the attainment deadline to 2010. The plan was locally approved and forwarded to the EPA in November 2004. This plan is the currently adopted blueprint for improved ozone air quality in the basin.

The 1-hour federal standard was replaced by an 8-hour standard in mid-2005. The deadline for approving a revised plan for the 8-hour ozone standard is 2007, and the attainment deadline for the basin is 2013. The 1-hour plan will continue to function as the operative attainment strategy until the 8-hour standard attainment plan replaces the current extreme non-attainment plan.

The California Air Resources Board (ARB) is required to periodically review the most recent health effects studies, and revise state AAQS accordingly. Based upon this mandate, the ARB has adopted, or is adopting, state standards for ozone (8-hour), PM-10, PM-2.5 and nitrogen dioxide (NO2) that are more stringent than their federal counter-parts.

San Joaquin Valley Air Polution Control District Rules and Regulations

The SJVAPCD has developed a number of rules and regulations to reduce emissions from existing air pollution sources and to offset the effects of continued Central Valley growth. Many rules are aimed at industrial sources or heavy industries. As the major air pollution sources become better controlled, newer rules focused on smaller sources that are significant pollution contributors on a cumulative scale. The air district is pre-

empted from directly controlling on-road vehicles, trains, etc., but does have authority to regulate their impact through "indirect source" rules. The list of APCD rules that are potentially applicable to the proposed project include:

- Rule 3135 - Dust Control Plan and Fee
- Rule 4102 - Nuisance Prohibition
- Rule 4103 - Open Burning Limits on Agricultural Debris
- Rule 4641 - Asphalt Emissions Limits
- Rule 4901 - Prohibits Wood-Burning Fireplaces Except in Very Low-Density Housing.
- Rule 4902 - Requires Low-NOx Water Heaters
- Regulation VIII - Fugitive PM-10 Prohibitors
- Rule 9510 - Indirect Source Review - Traffic and Construction Emissions Impact Mitigation

3.1.4. THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, the proposed project will have a significant impact if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

- 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);

- Expose sensitive receptors to substantial pollutant concentrations; or

- Create objectionable odors affecting a substantial number of people.

3.1.5. IMPACTS

Air Quality Management Plan – No Impact: The proposed project is consistent with the Air Quality Management Plan.

Regionally, at project build-out in year 2030, the project will generate 28,300 daily trips to the project. However, it will also provide living space for an estimated 3,023 people, schools to accommodate 1,000 students, as well as office and retail facilities. Because people can live, shop and work in the same neighborhood, with pedestrian access to neighborhood schools and recreational parks, the project is intended to have a positive effect on air quality by potentially reducing vehicle emissions.

In the City of Lodi's Housing Element for 2003-2009, adopted in 2004 as part of the General Plan, approximately 5,004 dwelling units were identified for annexation residential development. With its planned 1,084 dwelling units, this project will account for approximately 20 percent of that planned development.

The basin Air Quality Management Plan (AQMP) is based upon the growth forecasts for the region. The AQMP anticipates emissions increases from planned growth, and emissions reductions from existing and future control programs. To the extent that the proposed project is consistent with City of Lodi housing projections, and to the extent that local job generation is air quality positive in reducing out-of-area travel, the project is considered consistent with the AQMP.

The proposed project also incorporates transit improvements to reduce dependence on automobiles and is consistent with the regional transit programs. In addition, the Concept Plan for the site incorporates open space and trails. The culmination of the project's design features is a mixed-use community with multiple circulation options that provides residents and employees both services and opportunities to live, work, recreate, shop, and dine within their community.

Development of the project site is also required to comply with the City of Lodi Growth Management Ordinance, which is detailed in Section 3.7 of this EIR. The purpose of the Growth Management Ordinance is to provide a growth management system to regulate the character, location, amount and timing of future development to help achieve the policies of the General Plan. This ordinance allows for the number of residential units approved by the City to reflect a 2 percent yearly limitation on growth-based population.

Impact 3.1.1: Violation of Air Quality Standards – Significant Impact

The proposed Reynolds Ranch Development project would generate short-term air pollutants from construction activities and long-term air pollutants from vehicle emissions and operation of the proposed development. In their *Guide for Assessing and Mitigating Air Quality Impacts*, the SJVACPC provides thresholds of significance for emissions of air pollutants, as summarized in the following table (Table 3.1.5):

TABLE 3.1.5: SJVAPCD EMISSIONS SIGNIFICANCE THRESHOLDS

Pollutant	Construction	Operational
Ozone Precursors (ROG and NOx)	Not significant unless specifically advised by SJVAPCD	ROG: 10 Tons/yr. NOx: 10 Tons/yr.
CO	Not significant unless specifically advised by SJVAPCD	Cause an exceedance of the CAAQS (1-hour or 8-hour)
PM-10	PM-10 Emission from a Large Construction Project is considered Significant Unless: 1) All Control Measures in GAMAQI Table 6-2 are implemented*; and 2) The appropriate Enhanced Control Measures and Additional Control Measures in GAMAQI Table 6-3 are implemented.	No established significance threshold

* By regulation all Control Measures in GAMAQI Table 6-2 are required for all construction sites.
Source: SJVAPCP *Guide for Assessing and Mitigating Air Quality Impacts*, Adopted August 10, 1998, rev.

It should be noted that the emission thresholds were established based on the attainment status of the air basin in regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety to the satisfaction of the EPA, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

Giroux and Associates calculated the project's potential air emissions using the "URBEMIS 2002 Air Emissions From Land Development" model (URBEMIS model). The following discussion compares the project's construction- and operation-induces air pollutants to the SJVAPCD's thresholds of significance.

Impact 3.1.1 (A): Construction Generated Air Pollutants – Less-Than-Significant Impact After Mitigation: Construction of the proposed project would generate air pollutants, including equipment exhaust and fugitive dust. With the application of SJVAPCD Regulation VIII, Rule 9510, and incorporation of Mitigation Measure 3.1.1, the proposed project's construction generated air pollutants would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Construction activities may generate fugitive dust (PM-10) during clearing and grading, and equipment exhaust from earth-moving and construction equipment. The SJAPCD considers reduction of fugitive dust through compliance with Regulation VIII Control Measures, as well as the applicable "Enhanced Control Measures" and "Additional Control Measures" identified in Table 6-3 of the GAMAQI, to be adequate proof that PM-10 emissions from soil disturbance on large construction projects have been reduced to less-than-significant levels. The Regulation VIII Control Measures are required for the project by a series of SJVAPCD rules and the applicable "Enhanced Control Measures" and "Additional Control Measures" are identified in this EIR as Mitigation Measure 3.1.1.

Construction equipment exhaust may impact regional air quality in ways that are not alleviated by Regulation VIII or the enhanced/additional control measures. Diesel-fueled equipment exhaust contains high levels of NOx that participate in regional smog formation. Diesel exhaust also contains diesel particulate matter (DPM) that is a known carcinogen. The Air District has therefore developed mitigation requirements for all major construction projects. A major development is defined as:

- 50 of more residential units
- 2,000 square feet of commercial space
- 39,000 square feet of office space

The proposed Reynolds Ranch project qualifies as major under every one of these categories. These mitigation requirements are a component of Rule 9510 (adopted December, 2005). Rule 9510 became effective March 1, 2006.

For construction equipment, emissions must be reduced by a specified level compared to the emissions that would have resulted from using statewide average equipment.

The emissions for any equipment greater than 50 horse-power (HP) reduction requirement are as follows:

- 20% of total NOx emissions
- 45% of total PM-10 emissions

These reductions can be achieved by using less pollutant equipment, or by paying an in-lieu fee, or by a combination of both approaches. The fee is approximately $9,000 per ton for each pollutant.

The SJVAPCD will utilize the collected fees to implement basin-wide pollution control programs such as purchase of cleaner equipment for transit agencies, school districts, etc. Documentation of the calculated construction activity emissions, any "credit" for a commitment to using cleaner equipment (diesel equipment with oxidation catalysts, soot filters, etc.), and any residual excess to be mitigated by payment of fees must be included in an Air Impact Assessment (AIA) required for every major project. The AIA may be prepared by the project applicant, or the APCD will prepare the AIA and fee calculation using default values. The AIA application must be submitted no later than the date of any final discretionary approval by a public agency. Compliance with Rule 9510 requirements for construction equipment exhaust is considered to reduce exhaust impacts to regional air quality to less-than-significant level.

Impact 3.1.1 (B): Operational Emissions of Ozone Precursors – Significant and Unavoidable Impact: Operation of the proposed project would generate NOx and ROG, which are ozone precursors, in excess of the SJVAPCD's yearly emission significance thresholds. The project's operational emission of ozone precursors is a significant and unavoidable impact.

The project proposes to develop 1,084 dwelling units, 350,000 square feet of commercial development, and 200,000 square feet of office space on approximately 220 acres. The project will add 28,300 daily trips to the regional traffic burden at project build-out. Residential use will also generate air emissions from a variety of small sources such as consumer products, paints and coatings, landscape utility equipment, natural gas combustion, cooking or recreational fires, pesticides, etc. These emissions are designated as "area sources" in contrast to the "mobile sources" from project-related travel. Conversion of agricultural uses to residential will eliminate the air pollution emissions associated with crop production that has historically occurred on and around this parcel.

Giroux and Associates conducted URBEMIS 2002 calculations for interim year 2008 and project build-out in the year 2015. The year 2015 was used as a worst-case scenario estimate even though build-out may not occur until beyond 2015, and is not expected until 2030. Cars are becoming progressively cleaner due to technological advances, such that a build-out assumption of 2015 will predict higher levels of emissions than a later year. Thus, for air pollutant emission, a build-out year of 2015 is a more conservative approach.

Additionally, total annual emissions were assumed to be 365 times the annual peak emission day. The URBEMIS 2002 model typically includes a winter calculation that

includes a large number of wood stoves and operating fireplaces that are not representative of suburban households. The smog problem in the San Joaquin Valley is furthermore a warm season issue. Multiplication of the summer emissions rate by 365 rather than a separate winter calculation was presumed to be more representative of project-related impacts to regional ozone issues. Table 3.1.6 presents the predicted emissions of ozone precursors.

TABLE 3.1.6: PROJECT OPERATION OZONE PRECURSOR AIR EMISSIONS (Tons/yr.)

Pollutant	Year 2008 Emissions	Year 2015 Emissions	SJVAPCD Threshold
ROG			
Area Sources	6.08	19.64	
Mobile Sources	13.34	27.38	
TOTAL	19.42	47.02	10
NOx			
Area Sources	2.16	4.43	
Mobile Sources	13.67	29.68	
TOTAL	15.83	34.11	10

As shown in Table 3.1.6, ROG and NOx will exceed the SJVAPCD significance thresholds. Mitigation of significant operational activity air quality impacts is required by SJVAPCD rules and regulations. The district has adopted an Indirect Source Review (ISR) rule (Rule 9510) that requires an applicant to reduce one-third of its baseline (non-mitigated) NOx emissions for a period of ten years after completion of each project phase.

Reduction, as required by Rule 9510, can occur through on-site measures, such as vehicle trip reduction or enhanced energy efficiency, or off-site measures, such as purchase of cleaner equipment or retirement of old “clunkers”. In accordance with Rule 9510, any quantifiable off-set must be documented in an Air Impact Assessment (AIA) application submitted to the SJVAPCD on or before the date of any final public agency discretionary action. Excess emissions require payment of an off-site mitigation fee. The SJVAPCD utilizes these fees for basin-wide mitigation programs that improve regional air quality.

However, even with the application of Rule 9510 to reduce net NOx emissions by one-third, the ozone precursor (NOx and ROG) emissions attributable to the project would exceed the SJVACPD’s significance thresholds, and there are no feasible mitigation measures available to reduce the project’s NOx and ROG emissions below SJVACPD’s significance thresholds. Given the basin’s non-attainment status for ozone, the project’s operational emission of ozone precursors in excess of the SJVACPD’s significance thresholds is considered a substantial contribution to this air quality violation. Therefore, the project’s operational emission of ozone precursors is a significant and unavoidable impact.

While NOx in its NO_2 form can itself affect health, plant life, and the physical environment (see Table 3.1.4), the primary concern for both NOx and ROG in the SJVAB is the transformation to ozone. This conversion process occurs several hours after emission and typically miles away from the source. As such, ozone is a regional concern rather than a

localized concern. The known effects of ozone include irritation of eyes, impairment of cardiopulmonary function, and plant leaf injury (see Table 3.1.4). The EPA and CARB recognize the AAQS (shown in Table 3.1.3) as the concentrations at which ozone becomes a potential concern for human health.

A more detailed description of the potential health affects of NOx and ozone is provided in the South Coast Air Quality Management District's publication *The Health Effects of Air Pollution on Children* contained in Appendix B of this EIR. Appendix B also contains an article published in the Journal of the American Medical Association titled *Association of Low-Level Ozone and Fine particles with Respiratory Symptoms in Children with Asthma*. This article makes a correlation between ozone and human health. Specifically, this article examined the simultaneous effects of ozone and $PM_{2.5}$ at levels below the National AAQS on daily respiratory symptoms and rescue medication use among children with asthma, and found that an increase in ozone caused an increase in the likelihood of wheezing, chest tightness, shortness of breath, and use of rescue medication in asthmatic children.

While the quantity of ozone precursor emissions attributable to the project cannot be reduced below the SJVACPD's significance thresholds, it should be noted that the proposed project includes a variety of features that indicate the proposed development would generate less air pollutants than a typical development of this size. Primarily, the site's mix of uses provides jobs, retail outlets, restaurants, a school, and recreational facilities integrated within a residential community. Thus, the project places residents and employees within short distances from amenities, which facilitates short vehicle trips and increased pedestrian and bicycle modes of travel. In addition, the proposed project includes a system of trails, sidewalks, and transit facilities throughout the project that further promote use of alternative forms of transportation.

Impact 3.1.1 (C): Operational Emissions of Particulate Matter – Less than Significant Impact: Operation of the proposed project would generate particulate matter. With the application of SJVAPCD Rule 9510, the proposed project's operational emissions of particulate matter would not contribute substantially to an existing or projected air quality violation.

Project operations would generate particulate matter through area and mobile sources, such as recreational fires and fuel combustion. As with ozone precursors, Giroux and Associates calculated the project's operational emissions of particulate matter using URBEMIS 2002 for interim year 2008 and project build-out in the year 2015. (Although project build-out is not expected until 2030, a build-out year of 2015 was used to calculate the worst-case scenario of air pollutant emissions.) Total annual emissions were conservatively assumed to be 365 times the annual peak emission day. Table 3.1.7 presents the predicted operational emissions of particulate matter.

TABLE 3.1.7: PROJECT OPERATION PARTICULATE MATTER AIR EMISSIONS (Tons/yr.)

Pollutant	Year 2008 Emissions	Year 2015 Emissions	SJVAPCD Threshold
Particulate Matter (PM-10)			
Area Sources	0.01	0.02	
Mobile Sources	14.43	61.42	
TOTAL	14.44	61.44	None established

The Indirect Source Review rule (Rule 9510), as described above in Impact 3.1.1 (B), requires reduction of particulate matter. Rule 9510 requires one-half of project-related PM-10 emissions to be reduced. With the application of Rule 9510, the project's operational emission of particulate matter would be a less-than-significant impact.

Impact 3.1.1 (D): Operational Emissions of Carbon Monoxide – Less than Significant Impact: Operation of the proposed project would generate carbon monoxide (CO). However, the proposed project's operational emissions of carbon monoxide would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Project operations would generate carbon monoxide (CO) though area and mobile sources, primarily from combustion of fuels. As with ozone precursors and particulate matter, Giroux and Associates calculated the project's operational emissions of particulate matter using URBEMIS 2002 for interim year 2008 and project build-out in the year 2015. (Although project build-out is not expected until 2030, a build-out year of 2015 was used to calculate the worst-case scenario of air pollutant emissions.) Total annual emissions were conservatively assumed to be 365 times the annual peak emission day. Table 3.1.8 presents the predicted operational emissions of particulate matter.

TABLE 3.1.8: PROJECT OPERATION CARBON MONOXIDE AIR EMISSIONS (Tons/yr.)

Pollutant	Year 2008 Emissions	Year 2015 Emissions	SJVAPCD Threshold
Carbon Monoxide (CO)			
Area Sources	2.16	5.87	
Mobile Sources	135.33	297.58	
TOTAL	137.34	303.45	Cause an exceedance of the CAAQS (1-hour or 8-hour)

From a regional standpoint, the San Joaquin Valley Air Basin attains the ambient air quality standards for CO, and annual amounts of CO emissions within the basin is not a concern. CO, however, can be a concern if localized concentrations, or "hotspots", reach or exceed the CAAQS. To analyze the potential for CO hotspots, Giroux & Associates utilized a CO screening analysis at the intersections surrounding the project. One-hour CO concentrations were calculated on the sidewalks adjacent to these intersections.

Possible air quality hotspots require substantial concentrations of traffic, highly congested traffic flow, and already substantially elevated background CO concentrations. The highest concentrations of pollutants occur at the most congested

intersections. The greatest traffic congestion without mitigation would occur further into the future as ambient growth occurs. However, vehicle emissions are reducing as technological advances occur and, as such, localized CO concentrations may be greater in an earlier year even though congestion could be worst in at later year. In order to assure the worst-case scenario is analyzed, localized CO concentrations were projected for two build-out years – 2015 and 2030. The results of this CO screening analysis are presented in Table 3.1.9.

TABLE 3.1.9: ONE-HOUR CO CONCENTRATIONS (PARTS/MILLION [ppm])

Intersections	Existing	2015 without Project	2015 & Project	2030 without Project	2030 & Project
AM Peak Hours					
Harney Lane/					
Hutchins St.	0.9	0.8	0.8	0.2	0.3
Stockton St.	0.6	0.6	0.6	0.2	0.2
Cherokee Ln.	0.6	0.7	0.7	0.2	0.2
PM Peak Hour					
Harney Lane/					
Hutchins St.	0.9	0.8	0.8	0.2	0.3
Stockton St.	0.6	0.6	0.7	0.2	0.2
Cherokee Ln.	0.5	0.8	0.6	0.2	0.2

Existing peak one-hour local CO background levels are 0.9 ppm. Combined worst-case background (3.7 ppm in 2004) plus local (0.9 ppm) equate to CO levels of 4.6 ppm, which are far below the one-hour standard of 20 ppm. Worst-case one-hour levels are even lower than the allowable 8-hour exposure of 9 ppm. Therefore, the proposed project would not cause a violation of CO air quality standards, and the project's operational emission of CO is a less-than-significant impact.

Impact 3.1.2: Contribution to Cumulative Criteria Air Pollutants – Significant and Unavoidable Impact: The project would emit ozone precursors (NOx and ROG) at levels that are significant as cumulatively considerable net increases of non-attainment criteria pollutants for the San Joaquin Valley Air Basin.

As discussed above in Impact 3.1.1, the proposed project would not, itself, cause a violation of any Ambient Air Quality Standards (AAQS). The San Joaquin Valley Air Basin, however, is designated a non-attainment basin for ozone and particulate matter, and on certain days throughout the year both ozone and/or particulate matter levels in the basin exceed AAQS. With the incorporation of Mitigation Measure 3.1.1, the project's emissions of particulate matter are considered less-than-significant in accordance with SJVACPD's standards (see Impact 3.1.1 [C]). However, the unavoidable ozone precursor (NOx and ROG) emissions attributable to the project would exceed the SJVACPD's significance thresholds (see Impact 3.1.1 [B]). Therefore, the project's impact of generating ozone precursors is significant as a cumulatively considerable net increase of criteria pollutants for which the project region is in non-attainment.

Impact 3.1.3: Exposure of Sensitive Receptors to Air Pollution – Less than Significant Impact After Mitigation: The proposed project would generate air pollutants that could affect sensitive receptors and the project involves siting sensitive receptors in the vicinity of air pollution generators. However, with existing regulations and the mitigation measures included in this EIR, the project would not expose any sensitive receptors to substantial pollutant concentrations.

Certain residents, such as the very young, the elderly, and those suffering from certain illnesses or disabilities, are particularly sensitive to air pollution and are considered sensitive receptors. In addition, active park users, such as participants in sporting events, can be sensitive air pollutant receptors due to increased breathing rates. Residential areas are considered to be sensitive to air pollution exposure because they may be occupied for extended periods, and residents may be outdoors where exposure is highest. Schools are similarly considered to be sensitive receptors. Commercial uses are considered less sensitive to air pollution exposure because they are populated by mainly healthy adults for limited periods in an indoor environment.

The project site is a 220-acre, rectangular-shaped plot on the southern periphery of the developed portion of the City of Lodi. The project site is primarily agricultural land with residences and a Moose Lodge also present onsite. The project site is bounded by the Union Pacific Railroad on the west and State Route 99 to the east, with the surrounding land uses extending east, west, and south remain currently as agricultural open space. Only the area north of the project is presently developed. The north side of Harney Lane opposite of the project site is developed with low-density single-family uses in the east and industrial/manufacturing uses along the western frontage. Of the surrounding and onsite land uses, only the residences are sensitive receptors.

As discussed above in Impact 3.1.1, the project would generate short-term (construction) and long-term (operational) air pollutants. The criteria pollutants generated by the project are ozone precursors (NOx and ROG), particulate matter, and carbon monoxide.

Many mobile source air pollutants, such as NOx and ROG, require additional transformation to convert into their most unhealthful forms, such as ozone. That conversion process occurs several hours later and miles away. Thus, emissions of these types of pollutants, known as “secondary” pollutants, are not critical in local sensitive receptor exposure. Rather, localized sensitive receptor impacts derive mainly from “primary” pollutants that require no additional transformation. Primary pollutants that would be generated by the project consist primarily of CO and particulate matter (both from soil dust and diesel exhaust).

As discussed in Impact 3.1.1, a CO hot-spot analysis was conducted to determine if the project would cause any significant localized CO concentrations. This analysis revealed that even after project-induced traffic is added to the most congested intersections in the project vicinity, all localized air quality would remain well below both the California 1-hour and 8-hour CO standards. Therefore, the project’s traffic-related air pollutant emissions would not significantly affect any sensitive receptors.

As also discussed under Impact 3.1.1, the project would generate particulate matter during both construction and operation. However, with the application of SJVAPCD Regulation VIII, Rule 9510, and incorporation of Mitigation Measure 3.1.1, the proposed the project's generation of particulate matter would be minimized. As a result, the particulate matter generated by the proposed project would not significantly impact any sensitive receptors.

In addition to potential generation of air pollutants, the proposed project involves siting sensitive receptors, including the proposed residences, school, park, and pedestrian trails. The project site is bounded by SR 99 on the east and the UPRR on the west; and vehicle and train operations on these transportation corridors could generate air pollutants that affect the project site. However, the proposed project does not involve placing sensitive receptors adjacent to these transportation corridors, and the proposed siting of sensitive receptors complies with the CARB's siting recommendations identified in the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB, 2005).

In addition to criteria pollutants, sensitive receptors could be affected by toxic or hazardous air pollutants. Toxic or hazardous air pollutants are those that can be harmful to humans even at very low exposures. There are no releases of toxic air contaminants associated with the Reynolds Ranch development. However, on-site residential uses may be exposed to air pollution emitted by surrounding agricultural operations, which may include agrochemicals that emit airborne pollutants and operations that generate dust.

Agricultural uses are located immediately west, east (beyond SR 99), and south of the project site. The railroad tracks separate the on-site residential uses from the agricultural uses to the west. Additionally a mini-storage facility located between the tracks and planned medium-density residential uses will help shield the western perimeter, and an agricultural buffer is planned along the southern periphery of the project site. These site design features would minimize potential conflicts in land use.

Schools and parks are considered pollution-sensitive, especially for toxic or hazardous compounds sometimes used in agriculture. These uses will be located within the center of the project site in order to maximize their setback from active agricultural fields and regional transportation corridors. Application and toxicity of agricultural chemicals is also strictly regulated when they are used near homes or schools. Although the project site is adjacent to active agricultural operations, the potential sensitive receptor impacts are less-than-significant due to the project's design and regulatory control regarding the use and application of agricultural chemical.

<u>Impact 3.1.4: Objectionable Odors – Less than Significant Impact</u>: The proposed land uses could be exposed to occasional odors emitted by surrounding agricultural operations.

There are no releases of odors associated with the Reynolds Ranch development that would be detectable beyond the site perimeter. However, on-site residential uses may be exposed to nearby agricultural operations that may generate nuisance odors. As

discussed above in Impact 3.1.3, the project's design provides separation between the proposed sensitive receptors and the existing nearby agricultural operations. In addition, nearby agricultural operations do not involve dairies, feed lots, poultry ranches, hog farms, or occasionally odorous crops such as onions or garlic. Therefore, the proposed project would not result in significant odor impacts.

3.1.6. CUMULATIVE IMPACTS

Impact 3.1.2 "Contribution to Cumulative Criteria Air Pollutants" considers the project-generated air pollutants in relation to the cumulative, basin-wide, scenario. This discussion identifies that the project would generate ozone precursors (NOx and ROG) at levels that are significant as cumulatively considerable net increases of non-attainment criteria pollutants for the San Joaquin Valley Air Basin. Therefore, the project will significantly contribute to a cumulative air quality impact of exceeding AAQS.

In addition to regional air quality, cumulative increase to localized air quality was also considered. The discussion of Impact 3.1.1 (D) explains that even with the addition of CO generated by the project and other development projects in the vicinity, peak localized CO levels would remain well below the air quality standards. Therefore, there would be no significant cumulative impacts to localized air quality from CO pollution.

3.1.7. MITIGATION MEASURES

Mitigation Measure 3.1.1: In addition to implementing the "Dust Control Measures for Construction" required by San Joaquin Valley Air Pollution Control District (SJVAPCD), construction onsite shall implement the "Enhanced and Additional Control Measures for Construction Emissions of PM-10" identified in Table 6-3 of the SJVAPCD's *Guide for Assessing and Mitigating Air Quality Impacts*. The measures identified in Table 6-3 are as follows:

- Limit traffic speeds on unpaved roads to 15 mph;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent;
- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site;
- Install wind breaks at windward side(s) of construction areas;
- Suspend excavation and grading activity when winds exceed 20 mph; and
- Limit area subject to excavation, grading, and other construction activity at any one time.

3.1.8. LEVEL OF SIGNIFICANCE AFTER MITIGATION

Even with the incorporation of the mitigation measure identified above, Impacts 3.1.1 (B), and 3.1.2 remain significant. The following table is a summary of the thresholds of significance, potential impacts, and associated mitigation measures:

TABLE 3.1.10: SUMMARY OF AIR QUALITY THRESHOLDS OF SIGNIFICANCE, IMPACTS, AND MITIGATION MEASURES

Threshold of Significance	Recommended Mitigation Measure	Level of Significance
Would the project conflict with or obstruct implementation of the applicable air quality plan?	None Required	No Impact
Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?	Mitigation Measure 3.1.1: In addition to implementing the "Dust Control Measures for Construction" required by San Joaquin Valley Air Pollution Control District (SJVAPCD), construction onsite shall implement the "Enhanced and Additional Control Measures for Construction Emissions of PM-10" identified in Table 6-3 of the SJVAPCD's *Guide for Assessing and Mitigating Air Quality Impacts*. The measures identified in Table 6-3 are as follows: • Limit traffic speeds on unpaved roads to 15 mph; • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent; • Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site; • Install wind breaks at windward side(s) of construction areas; • Suspend excavation and grading activity when winds exceed 20 mph; and • Limit area subject to excavation, grading, and other construction activity at any one time. Potential project impacts would also be lessened through project design features and compliance with SJVAPD Regulation VIII and Rule 9501. See the discussion of Impact 3.1.1 on pages 3.1-11 through 3.1-17. There are no other feasible mitigation measures available to reduce or avoid this impact.	Significant Impact
Would the project 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)?	Potential project impacts would be lessened through project design features and compliance with SJVAPD Rule 9510. See the discussion of Impact 3.1.2 on page 3.1-17. There are no other feasible mitigation measures available to reduce or avoid this impact.	Significant Impact
Would the project expose sensitive receptors to substantial pollutant concentrations?	Potential project impacts would be lessened through project design features, compliance with SJVAPD Regulation VIII and Rule 9510, and incorporation of Mitigation Measure 3.1.1. See the discussion of Impact 3.1.3 on pages 3.1-18 through 3.1-19. No further mitigation measures are required.	Less than Significant After Incorporation of Mitigation Measures
Would the project create objectionable odors affecting a substantial number of people?	Potential project impacts would be lessened through project design features. See the discussion of Impact 3.1.4 on pages 3.1-19 through 3.1-20. No further mitigation measures are required.	Less than Significant Impact