

URBEMIS Air Quality Analysis

Santa Clara County is located within the Bay Area Air Basin (BAAB) which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The Air District consists of nine counties including Alameda, Contra Costa, Marin, Napa, San Francisco, Santa Clara, San Mateo, southern Sonoma and the southeastern portion of Solano County. The BAAB has been designated as a nonattainment area for the State standards for PM₁₀ and PM_{2.5} (respirable particulate matter) as well as Ozone. According to National standards, the Air Basin has been designated as a nonattainment area for Ozone. Construction of the proposed project is not anticipated to conflict with or obstruct implementation of the *Bay Air 2000 Clean Air Plan* or the *Bay Area 2005 Ozone Strategy* with implementation of the proposed mitigation. The Air District is beginning the process to prepare the 2009 Bay Area Clean Air Plan. There are no operational emissions associated with the proposed project as the project will not result in additional Alum Rock Park visitors or employees.

Regulatory Framework

The California Air Resources Board (ARB) and the U.S. Environmental Protection Agency (EPA) currently focus on the following air pollutants as indicators of ambient air quality: Ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM₁₀ and PM_{2.5}), and lead (Pb). Because these are the most prevalent air pollutants known to be deleterious to human health and extensive health-effects criteria documentation is available, they are commonly referred to as "criteria air pollutants." Federal and State ambient air quality standards (AAQS), designations, and Bay Area attainment status are provided in Table 1 below.

The State of California Governor's Office of Planning and Research (OPR) released a Technical Advisory entitled *CEQA and Climate Change: Addressing Climate Change through CEQA Review* on June 19, 2008. According to the Technical Advisory, State law defines Greenhouse Gas (GHG) to include the following: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (Health and Safety Code, section 38505(g)). The most common GHG that results from human activity is carbon dioxide, followed by methane and nitrous oxide. Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006 recognizes that California is the source of substantial amounts of GHG emissions. The statute begins with several legislative findings and declarations of intent, including the following:

Global warming poses a serious threat to the economic wellbeing, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snow pack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems (Health and Safety Code, section 38501). In order to avert these consequences, AB 32 establishes a state goal of reducing GHG emissions to 1990 levels by the year 2020 (a reduction of approximately 25 percent from forecast emission levels) with further reductions to follow (OPR, 2008).

CEQA requires public agencies to identify the potentially significant effects on the environment of projects they intend to carry out or approve, and to mitigate significant effects whenever it is feasible to do so. While AB 32 did not amend CEQA to require new analytic processes to account for the environmental impacts of GHG emissions from projects subject to CEQA, it does acknowledge that such emissions cause significant adverse impacts to human health and the environment. Senate Bill 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs OPR to develop draft CEQA Guidelines "for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions" by July 1, 2009 and directs the Resources Agency to certify and adopt the CEQA Guidelines by January 1, 2010. OPR anticipates delivering a package of CEQA Guideline Amendments to the Resources Agency as early as January 2009 (OPR, 2008).

Although the CEQA Guidelines, at Appendix G, provide a checklist of suggested issues that should be addressed in an EIR, neither the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for performing an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. A threshold of significance is essentially a regulatory standard or set of criteria that represent the level at which a lead agency finds a particular environmental effect of a project to be significant. Compliance with a given threshold means the effect normally will be considered less than significant. Public agencies are encouraged, but not required, to adopt thresholds of significance for environmental impacts. Even in the absence of clearly defined thresholds for GHG emissions, the law requires that such emissions from CEQA projects must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact. To this end, OPR has asked ARB technical staff to recommend a method for setting thresholds which will encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the state. Until such time as state guidance is available on thresholds of significance for GHG emissions, OPR recommends the following approach to CEQA analysis. Compliance with CEQA entails three basic steps: identify and quantify the GHG emissions; assess the significance of the impact on climate change; and if the impact is found to be significant, identify alternatives and/or mitigation measures that will reduce the impact below significance. Lead agencies should make a good-faith effort, based on available information, to calculate, model, or estimate the amount of CO₂ and other GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities (OPR, 2008).

Pollutant	Averaging Time	California Standards ¹		National Standards ²	
		Concentration	Attainment Status	Concentration ³	Attainment Status
Ozone	8 Hour	0.070 ppm (137 µg/m ³)	N ⁹	0.075 ppm	N ⁴
	1 Hour	0.09 ppm (180 µg/m ³)	N		See footnote # 5
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m ³)	A	9 ppm (10 mg/m ³)	A ⁶
	1 Hour	20 ppm (23 mg/m ³)	A	35 ppm (40 mg/m ³)	A
Nitrogen Dioxide	1 Hour	0.18 ppm (338 µg/m ³)	A		
	Annual Arithmetic Mean	0.030 ppm (56 µg/m ³)		0.053 ppm (100 µg/m ³)	A
Sulfur Dioxide	24 Hour	0.04 ppm (105 µg/m ³)	A	0.14 ppm (365 µg/m ³)	A
	1 Hour	0.25 ppm (655 µg/m ³)	A		
	Annual Arithmetic Mean			0.030 ppm (80 µg/m ³)	A
Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	N ⁷		
	24 Hour	50 µg/m ³	N	150 µg/m ³	U
Particulate Matter - Fine (PM _{2.5})	Annual Arithmetic Mean	12 µg/m ³	N ⁷	15 µg/m ³	A

	24 Hour			35 µg/m ³ See Footnote 10	U
Sulfates	24 Hour	25 µg/m ³	A		
Lead	Calendar Quarter			1.5 µg/m ³)	A
	30 Day Average	1.5 µg/m ³)	A		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	U		
Vinyl Chloride (chloroethene)	24 Hour	0.010 ppm (26 µg/m ³)	No information available		
Visibility Reducing particles	8 Hour(1000 to 1800 PST)	See Footnote 8	U		

A=Attainment N=Nonattainment U=Unclassified

mg/m ³ =milligrams per cubic meter	ppm=parts per million	µg/m ³ =micrograms per cubic meter
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NOTES

- California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, suspended particulate matter - PM10, and visibility reducing particles are values that are not to be exceeded. The standards for sulfates, Lake Tahoe carbon monoxide, lead, hydrogen sulfide, and vinyl chloride are not to be equaled or exceeded. If the standard is for a 1-hour, 8-hour or 24-hour average (i.e., all standards except for lead and the PM10 annual standard), then some measurements may be excluded. In particular, measurements are excluded that ARB determines would occur less than once per year on the average. The Lake Tahoe CO standard is 6.0 ppm, a level one-half the national standard and two-thirds the state standard.
- National standards other than for ozone, particulates and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the 3-year average of the 4th highest daily concentrations is 0.075 ppm (75 ppb) or less. The 24-hour PM10 standard is attained when the 3-year average of the 99th percentile of monitored concentrations is less than 150 µg/m³. The 24-hour PM2.5 standard is attained when the 3-year average of 98th percentiles is less than 35 µg/m³. Except for the national particulate standards, annual standards are met if the annual average falls below the standard at every site. The national annual particulate standard for PM10 is met if the 3-year average falls below the standard at every site. The annual PM2.5 standard is met if the 3-year average of annual averages spatially-averaged across officially designed clusters of sites falls below the standard.
- National air quality standards are set by US EPA at levels determined to be protective of public health with an adequate margin of safety.
- In June 2004, the Bay Area was designated as a marginal nonattainment area of the national 8-hour ozone standard. US EPA lowered the national 8-hour ozone standard from 0.80 to 0.75 PPM (i.e. 75 ppb) effective May 27, 2008. EPA will issue final designations based upon the new 0.75 ppm ozone standard by March 2010.
- The national 1-hour ozone standard was revoked by U.S. EPA on June 15, 2005.
- In April 1998, the Bay Area was redesignated to attainment for the national 8-hour carbon monoxide standard.
- In June 2002, CARB established new annual standards for PM_{2.5} and PM₁₀.
- Statewide VRP Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.
- The 8-hour CA ozone standard was approved by the Air Resources Board on April 28, 2005 and became effective on May 17, 2006.
- U.S EPA lowered the 24-hour PM_{2.5} standard from 65 µg/m³ to 35 µg/m³ in 2006. EPA is required to designate the attainment status of BAAQMD for the new standard by December 2009.

Available at http://www.baaqmd.gov/pln/air_quality/ambient_air_quality.htm

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Ozone

The ARB has set a primary AAQS for Ozone at greater than 0.09 parts per million (ppm) averaged over a one-hour period and 0.070 ppm over an eight-hour period. Under the California Clean Air Act, the BAAB is designated as a nonattainment area. The National 1-hour Ozone standard was revoked by the EPA on June 15, 2005. The EPA has set the primary and secondary federal ozone AAQS at greater than 0.075 ppm averaged over an eight-hour period. Under the Federal Clean Air Act, the BAAB is designated as a nonattainment area for the Federal eight-hour ozone AAQS (BAAB 2003 Air Quality Attainment Plan).

Inhalable Particulates

The ARB has established a primary AAQS for PM₁₀ at greater than 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) averaged over a 24-hour period, and greater than 20 $\mu\text{g}/\text{m}^3$ measured as an annual average. The EPA's 24-hour primary and secondary AAQS for PM₁₀ is greater than 150 $\mu\text{g}/\text{m}^3$. EPA's PM_{2.5} 24-hour primary and secondary AAQS is greater than 35 $\mu\text{g}/\text{m}^3$, and the annual average is greater than 15 $\mu\text{g}/\text{m}^3$. ARB's annual PM_{2.5} standard is greater than 12 $\mu\text{g}/\text{m}^3$. The BAAB is designated as an attainment area for State PM₁₀ standards (BAAB 2003 Air Quality Attainment Plan) and as attainment for Federal standards (EPA, 1999).

Fine Particulate Matter

In July 1997, the EPA adopted a new federal ambient air quality standard for finer particulate matter, particulate matter of 2.5 microns or less in diameter (PM_{2.5}), to be used in conjunction with the federal PM₁₀ standard (EPA 1999). The ARB has established a primary AAQS for PM_{2.5} at greater than 12 $\mu\text{g}/\text{m}^3$ averaged as an annual arithmetic mean. The EPA's 24-hour primary and secondary AAQS for PM_{2.5} is greater than 35 $\mu\text{g}/\text{m}^3$, and greater than 15 $\mu\text{g}/\text{m}^3$ as an annual arithmetic mean. The BAAB is in attainment for the Federal and State for PM_{2.5} AAQS.

Carbon Monoxide

The ARB's primary AAQS for carbon monoxide is greater than 20 ppm for a one-hour period, and 9 ppm averaged over an eight-hour period. The EPA's primary AAQS is greater than 35 ppm for one-hour, and 9 ppm for eight-hours. For an eight-hour average, the ARB and EPA AAQS is greater than 9 ppm. The BAAB is in Federal and State attainment for carbon monoxide AAQS.

Nitrogen Dioxide

The ARB has established a primary AAQS for nitrogen dioxide at greater than 0.18 ppm averaged over a one-hour period, and 0.030 ppm as an annual arithmetic mean. The EPA has set the federal nitrogen dioxide primary and second AAQS at greater than 0.053 ppm as an annual arithmetic mean. The BAAB is in Federal and State attainment for nitrogen dioxide AAQS.

Sulfur Dioxide

The ARB's primary AAQS for sulfur dioxide is 0.04 ppm averaged over 24-hours, and 0.25 ppm averaged over 1-hour. The EPA has set the Federal sulfur dioxide primary AAQS at greater than 0.030 ppm as an annual arithmetic mean, and 0.14 averaged over 24-hours. The secondary AAQS is 0.5 ppm averaged over 3-hours. Sulfur dioxide levels in all areas of the NICCAB are below Federal and State standards. The BAAB is in Federal and State attainment for sulfur dioxide AAQS.

Lead

The ARB has established a primary AAQS for lead is 1.5 $\mu\text{g}/\text{m}^3$ averaged over 30-days. The EPA has set the federal lead primary and secondary AAQS at greater than 1.5 $\mu\text{g}/\text{m}^3$ averaged over a calendar quarter. Lead levels in all areas of the NCCAB are below Federal and State standards. The BAAB is in Federal and State attainment for lead AAQS.

Construction activities will result in temporary emissions of diesel and gasoline engine combustion products and earthen dust from excavating activities. To avoid a significant impact, implementation of BMPs detailed in Mitigation Measure III-I through Mitigation Measure III-III. With the implementation of these Mitigation Measures, construction emissions are judged to be less than significant.

Regional area- and mobile-source emissions of Reactive Organic Gases (ROG), NO_x, CO, SO₂ and PM₁₀ (which includes PM_{2.5}) associated with the implementation of the project were estimated using the URBEMIS (urban emissions) 2007 Version 9.2 computer program, which models emissions for land use development projects. The URBEMIS program allows mitigation measures to be selected within the model. Thus the emission estimates in Table 2 below assume specific mitigation measures (included in this analysis) are implemented during the construction of the proposed project. URBEMIS allows land use selections that include project location specifics and trip generation rates along with double counting and pass-by trip options. The double-counting option is designed to minimize double counting of internal vehicle trips between residential and non-residential land uses. The pass-by trip option estimates vehicle-

trip emissions based on the percentage of primary trips, diverted linked trips, and pass-by trips assumed for specific land uses. URBEMIS accounts for area emissions from the usage of natural gas, wood stoves, fireplaces, landscape maintenance equipment, and consumer products, and mobile sources emissions because of generation of vehicle trips. Regional area and mobile source emissions were estimated based on trip generation rates forecasted for this type of land use. Model results summarized in Table 2 indicate that construction of the proposed project would result in significant short-term PM emissions if mitigation measures are not implemented. With mitigation the short-term emissions would be reduced to the less than significant levels.

	ROG	NO _x	CO	SO ₂	PM ₁₀ Dust	PM ₁₀ Exhaus	PM ₁₀	PM _{2.5} Dust	PM _{2.5} Exhaus	PM _{2.5}	CO ₂
2009 TOTALS (tons/year unmitigated)	0.24	3.60	1.38	0.00	0.21	0.12	0.33	0.04	0.11	0.16	466.32
2009 TOTALS (tons/year mitigated)	0.24	1.61	1.38	0.00	0.02	0.02	0.03	0.00	0.02	0.02	466.32
Percent Reduction	0.00	55.35	0.00	0.00	92.79	85.37	90.10	92.71	85.53	87.55	0.00
2010 TOTALS (tons/year unmitigated)	0.11	1.52	0.61	0.00	0.06	0.05	0.11	0.01	0.05	0.06	194.28
2010 TOTALS (tons/year mitigated)	0.11	0.65	0.61	0.00	0.01	0.01	0.01	0.00	0.01	0.01	194.28
Percent Reduction	0.00	57.15	0.00	0.00	91.21	88.66	90.02	91.07	88.87	89.32	0.00
2011 TOTALS (tons/year unmitigated)	0.13	1.84	0.72	0.00	0.08	0.06	0.14	0.02	0.06	0.08	236.98
2011 TOTALS (tons/year mitigated)	0.13	0.65	0.72	0.00	0.01	0.01	0.01	0.00	0.00	0.01	236.98
Percent Reduction	0.00	64.58	0.00	0.00	92.68	91.52	92.16	92.56	91.69	91.88	0.00
2012 TOTALS (tons/year unmitigated)	0.00	0.01	0.00	0.00	0.13	0.00	0.13	0.03	0.00	0.03	1.25
2012 TOTALS (tons/year mitigated)	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	1.25
Percent Reduction	0.00	0.00	0.00	0.00	93.02	0.00	92.63	93.01	0.00	91.32	0.00

ROG and NO_x are precursors to Ozone formation and Santa Clara County is a nonattainment area for Ozone. Model results indicate that construction of the proposed project would result in short-term significant emissions of NO_x and PM₁₀. Mitigation Measure III-I, -II, and -III are proposed below to bring construction-related emissions to a less than significant level. There are no operational emissions associated with the proposed project as the project will not result in additional Alum Rock Park visitors or employees.

According to the *BAAQMD CEQA Guidelines Assessing Air Quality Impacts of Projects and Plans* the District's approach to CEQA analyses of construction impacts is to emphasize implementation of effective and comprehensive control measures rather than detailed qualification of emissions. The District has identified a set of feasible PM₁₀ control measures for construction activities. These control measures are listed in Table 3 below. As noted in the table, 'basic measures' should be implemented at all construction sites regardless of size. Additional 'enhanced measures' should be implemented at construction sites greater than four acres, where PM₁₀ emissions generally will be higher. 'Optional measures' may be implemented if further emissions reductions are deemed necessary by the lead Agency. The determination of significance with respect to construction emissions should be based on a consideration of the control measures to be implemented. If all of the control measures indicated in Table 3 (as appropriate, depending of the size of the project area) will be implemented, than air pollution emissions form construction activities would be considered a less than significant impact. If all of the appropriate measures in Table 3 will not be implemented, the construction impacts would be considered to be significant (unless the Lead Agency provides a detailed explanation as to why a specific measure is unnecessary or not feasible).

Land uses such as schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because infants and children, the elderly, and people with health afflictions, especially respiratory ailments, are more susceptible to respiratory infections and other air-quality-related health problems. Residential areas are also considered to be sensitive to air pollution because residents tend to be at home for extended periods of time. There are no residences in the immediate project area. There are no nearby hospitals. Toyon Elementary School, Pala Middle School, and James Lick High School are

over 1.1, 1.75, and 1.85 miles west of the project site respectively. No significant impacts from objectionable odors will result from the project.

Construction activity emissions will be mitigated to a less than significant level as discussed above. Operational activities will not have the potential to result in long-term impacts as pre- and post-project conditions will be identical in regard to air quality. Greenhouse gas (GHG) emissions related to the project would result from the running of construction equipment and vehicles, but would result in a short-term less than significant impact during construction of the project with the incorporated mitigation. Associated air quality/global warming impacts with the proposed project are considered less than significant both individually and cumulatively. Pre- and post-project conditions will be identical, resulting in no net increase or decrease of GHG in the long-term. The proposed project will not otherwise degrade the atmospheric environment or substantially alter air movement, moisture, temperature or other aspects of climate.

IMPACT III-I: Potential acute changes to air quality during construction including NO_x, PM₁₀, and CO_x emissions.

MITIGATION MEASURE III-I: DUST CONTROL

The applicant, at all times, shall comply with Best Management Practices (BMPs) such as, but not limited to: (1) covering open bodied trucks when used for transporting materials likely to give rise to airborne dust; (2) covering of all soil stock piles with tarps; (3) watering all exposed surfaces and haul roads two times daily for control of dust in construction operations, grading of roads, or land clearing; (4) daily water sweeping of all paved access roads, parking, staging areas at construction sites, and adjacent public streets if visible material present or install wheel washers for all exiting trucks, (5) washing off the tires or tracks of all trucks and equipment leaving the site (6) suspending excavation and grading activity when winds (instantaneous gusts) exceed 25 mph, (7) limiting the area subject to excavation, grading and other construction activity at any one time, (8) hydroseeding or applying (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more), (9) replanting vegetation in disturbed areas as quickly as possible, and (10) restoring and stabilizing exposed surfaces at the conclusion of earth moving activities.

MITIGATION MEASURE III-II: EQUIPMENT EXHAUST CONTROL

The applicant, at all times, shall comply with Best Management Practices (BMPs) such as, but not limited to: (11) reducing unnecessary idling of construction equipment (i.e., limit idling time to 5 minutes or less as detailed in Mitigation Measure III-III and -IV below); (12) the use of aqueous diesel fuel by construction equipment where feasible; (13) the use of diesel particulate filters in construction equipment where feasible, (14) the use of catalytic converters in gasoline-powered construction equipment where feasible, and (15) where possible, use newer, cleaner-burning diesel-powered construction equipment.

TALBE 3: FEASIBLE CONTROL MEASURES FOR CONSTRUCTION EMISSIONS OF PM₁₀

Basic Control Measures. -The following controls should be implemented at all construction sites.

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

Enhanced Control Measures. -The following measures should be implemented at construction sites greater than four acres in area.

- All "Basic" control measures listed above.
 - Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
 - Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
 - Limit traffic speeds on unpaved roads to 15 mph. **(There are no unpaved roads within construction activity areas.)**
 - Install sandbags or other erosion control measures to prevent silt runoff to public roadways. **(The proposed construction activities will not result in runoff to public roadways.)**
- Replant vegetation in disturbed areas as quickly as possible.

Optional Control Measures. -The following control measures are strongly encouraged at construction sites that are large in area, located near sensitive receptors or which for any other reason may warrant additional emissions reductions.

- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.
- Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.
- Limit the area subject to excavation, grading and other construction activity at any one time.

MITIGATION MEASURE III-III: General idling would be limited to 5 minutes per location for all applicable diesel equipment. Operators of diesel equipment without idle reduction devices shall manually turn off their equipment after 5 minutes of idling. Diesel engine operators shall not be subject to idling limitations under specified conditions in which idling would be necessary to accomplish the work for which the vehicle/equipment is designed. Trucks with sleeper berths would be allowed to idle for more than 5 minutes only if an alternative means of providing power and heating or cooling to the berth were not available and the sleeping berth is in use. Devices such as fuel-fired heaters, auxiliary power units, and power inverter/chargers for use with batteries and grid-supplied electricity could be used to provide heating and air conditioning at truck stops for truck cab comfort. Signage at staging and work areas or informational materials shall be provided to the contractors (Bay Area Ozone Strategy Volume II, 2005).

MITIGATION MEASURE III-III: The applicant, at all times, shall comply with Regulation 6, Particulate Matter, Rule 1 of the BAAQMD. Pile driving hammers powered by diesel fuel shall comply with one of the following standards:

306.1 A person shall not emit from any diesel pile driving hammer for a period or periods aggregating more than four minutes during the driving of a single pile, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.

306.2 A person shall not emit from any diesel pile driving hammer for a period or periods aggregating more than four minutes during the driving of a single pile, a visible emission which is as dark or darker than No. 2 on the Ringelmann Chart or of such opacity as to obscure an observer's view to an equivalent or greater degree provided that the operator utilizes kerosene, smoke suppressing fuel additives and synthetic lubricating oil, and the requirements of Section 6-1-503 are satisfied (Regulation 6, Particulate Matter, Rule 1).

Based on the analysis above, potential impacts due to the proposed project to air quality are less than significant with mitigation. Cumulative air quality impacts are not anticipated to result from the proposed

project when analyzed in connection with the effects of past projects, other current projects, and probable future projects.

REFERENCES

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