



SECTION 7.0

Other CEQA Considerations



7.0 OTHER CEQA CONSIDERATIONS

7.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTIONS SHOULD THEY BE IMPLEMENTED

Approval of the proposed Mancara at Robinson Ranch Project would cause irreversible environmental changes. Implementation of the proposed Mancara at Robinson Ranch Project would result in the following changes:

- Permanent commitment of land that would be physically altered to residential and commercial.
- Alteration of the human environment as a consequence of the development process. The proposed project represents a commitment to residential and commercial uses, which intensifies land uses within the project site.
- Utilization of various new raw materials, such as lumber, sand and gravel for construction. The energy consumed in development and maintenance of the project site may be considered a permanent investment.
- Incremental increases in vehicular activity in the surrounding circulation system, resulting in associated increases in air emissions and noise levels.

7.2 GROWTH INDUCING IMPACTS

In accordance with *CEQA Guidelines* Section 15126.2(d), the following discussion addresses ways in which the proposed project could foster employment, housing or population growth, whether directly or indirectly in the surrounding environments. In addition, growth-inducing impacts of the proposed project are assessed in terms of whether the project remove obstacles to development, requires construction of expanded facilities that could serve other future development, or otherwise facilitates or encourage development of other activities that could significantly affect the environment. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Growth-inducing impacts fall into two general categories: direct and indirect. Direct growth-inducing impacts are generally associated with the provision of urban services to an undeveloped area. The provision of these services to a site and the subsequent development can serve to induce other landowners in the vicinity to convert their property to urban uses. Indirect, or secondary growth-inducing impacts, consist of growth induced in the region by the additional demands for housing, goods and services associated with the population increase caused by, or attracted to, a new project.



7.2.1 DIRECT GROWTH-INDUCING IMPACTS

Direct growth-inducing impacts are generally associated with the provision of urban services to an undeveloped area, which can serve to induce other landowners in the vicinity to convert their property to urban uses. Currently, the majority of the project site is vacant and therefore does not contain infrastructure for water, sewer, gas and electricity. The proposed project would result in an increase demand of approximately 110.2 acre-feet per year (AFY) of water. The increase in water demand would require the development of an on-site water system infrastructure in order to accommodate the proposed residential uses.

The proposed project would generate a total of 25,740 gallons per day (gpd) of wastewater. The proposed project would not exceed wastewater treatment requirements because the applicant would be required to obtain all permits and operate in compliance with all Regional Water Quality Control Board approvals. The project site would be served by the CSDLAC's Santa Clarita Valley Sanitation District, which has adequate capacity to serve the proposed project. Therefore, the proposed project would require the development of sewer lines within the project site.

The proposed project would also increase the demand for electricity and natural gas. The proposed project is projected to result in an increase in demand of approximately 557.0 megawatt-hours (MWh) of electricity per year. The electrical loads of the proposed project are within the parameters of projected load growth, which Southern California Edison (SCE) is planning to meet in the area. All on-site electricity lines would be installed to serve proposed uses, at the expense of the project applicant. No other improvements related to electricity would be necessary. Development of proposed uses would result in the consumption of approximately 659,835 cubic feet (cf) of natural gas per month, or 8,238 thousand cubic feet (kcf) per year. All on-site natural gas distribution pipelines would be installed to serve proposed uses, at the expense of the project applicant. No other improvements related to natural gas are necessary.

In summary, the proposed project would require the extension of natural gas and electric lines into the project site. In addition, on-site water and sewer lines would have to be developed in order to support the increase of demand as a result of the proposed project. However, the extension of these public utilities would not directly induce growth within the area. The area to the north is already proposed for development and development currently exists to the east, west, and south. Thus, the project site and surrounding area are served by existing infrastructure, including roads, electricity and natural gas lines, water, sewer, and storm drains. Therefore, the proposed project would not result in direct growth-inducing impacts.

7.2.2 INDIRECT GROWTH-INDUCING IMPACTS

As of January 1, 2010, the City's total population was estimated at 176,320 persons, as reported in the 2010 US Census. The proposed project would directly induce population growth by adding 99 new single family residential units on a 172.6-acre site, thereby inducing direct population growth. Based on an estimate of 3.092 persons per household (State of California Department of Finance, 2010), the increase of 99 housing units resulting from project implementation could potentially increase the City's population by approximately 306 persons. This represents an increase of approximately 0.002 percent of the City's projected 2010



population estimates and does not represent a substantial portion of the projected population for the City and would not induce substantial growth or concentration of population. The proposed project would also not exceed Santa Clarita Valley population projections of 243,104 persons by 2010 and 313,290 persons by 2020. Therefore, the proposed project would not result in indirect growth-inducing impacts.

7.3 ENERGY CONSERVATION

Public Resources Code Section 21100(b)(3) and *CEQA Guidelines* Appendix F require a description (where relevant) of the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, the California State Legislature adopted Assembly Bill 1575 (AB 1575) in response to the oil crisis of the 1970s. *CEQA Guidelines* Appendix F provides guidance for assessing potential impacts that a project could have on energy supplies, focusing on the goal of conserving energy by ensuring that projects use energy wisely and efficiently. Because Appendix F does not include specific significance criteria, this threshold is based the goal of Appendix F. Therefore, an energy impact is considered significant if the proposed project would:

- Develop land uses and patterns that cause wasteful, inefficient, and unnecessary consumption of energy or construct new or retrofitted buildings that would have excessive energy requirements for daily operation.

7.3.1 PROJECT ENERGY CONSUMPTION

SHORT-TERM CONSTRUCTION

In 1994, the U.S. Environmental Protection Agency (U.S. EPA) adopted the first set of emission standards (Tier 1) for all new off-road diesel engines greater than 37 kilowatts (kW). The Tier 1 standards were phased in for different engine sizes between 1996 and 2000, reducing NO_x emissions from these engines by 30 percent. The U.S. EPA Tier 2 and Tier 3 standards for off-road diesel engines are projected to further reduce emissions by 60 percent for NO_x and 40 percent for particulate matter from Tier 1 emission levels. In 2004, the U.S. EPA issued the Clean Air Non-road Diesel Rule. This rule will cut emissions from off-road diesel engines by more than 90 percent, and will be fully phased in by 2014.

Proposed project construction is estimated to occur over four phases between 2010 and 2022, and take 12 to 14 months. Table 7-1, Construction Fuel Consumption provides an estimate of construction fuel consumption based on information provided by the URBEMIS 2007 air quality computer model; refer to Appendix H, Air Quality Impact Analysis. As shown in Table 7-1, construction of the proposed project would consume a total amount of approximately 174,194 gallons of fuel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Additionally, Mitigation Measure AQ-1 requires the proposed project maintain construction equipment in proper tune to ensure equipment efficiency. Additionally, all diesel fueled construction vehicles would be required to meet the latest emissions standards. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.



Table 7-1
Construction Fuel Consumption

Equipment	Quantity	Horsepower	Load Factor	Fuel Consumption Rate ¹ (gallons per hour)	Duration ² (total hours)	Total Fuel Consumption ^{3,4} (gallons)
Crane	2	399	0.43	6.86	1,960	13,445.60
Forklift	6	145	0.30	1.74	6,240	10,857.60
Generator Set	2	549	0.74	24.38	2,080	50,710.40
Grader	13	174	0.61	4.25	7,840	33,320.00
Other Equipment	2	238	0.51	4.80	3,840	18,432.00
Paver	1	100	0.62	2.48	1,920	4,761.60
Roller	2	95	0.56	2.13	2,880	6,134.40
Scraper	2	313	0.72	9.01	560	5,045.60
Rubber Tired Dozer	3	357	0.59	8.43	1,500	12,645.00
Tractor/Loader/Backhoe	9	108	0.55	2.38	7,000	16,660.00
Water Truck	8	189	0.50	3.78	4,960	496.78
Welder	2	45	0.45	0.81	2,080	1,684.80
TOTAL⁴						174,193.78

Notes:

1 – Derived using the following equation:

$$\text{Fuel Consumption Rate} = \text{Horsepower} \times \text{Load Factor} \times \text{Fuel Consumption Factor}$$

Where:

Fuel Consumption Factor for a diesel engine is 0.04 gallons per horsepower per hour (gal/hp/hr) and a gasoline engine is 0.06 gal/hp/hr.

2 – Total hours of duration derived from URBEMIS 2007 modeling results; refer to Appendix H, Air Quality Impact Analysis.

3 – Total Fuel Consumption calculated using the following equation:

$$\text{Total Fuel Consumption} = \text{Duration in Hours} \times \text{Fuel Consumption Rate}$$

4 - Values may be slightly off due to rounding.

Source: Refer to Appendix H1, Air Quality Impact Analysis, for URBEMIS 2007 assumptions used in this analysis.

LONG-TERM OPERATIONS

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration (NHTSA) is responsible for establishing additional vehicle standards and for revising existing standards. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon (mpg). Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States.



Trip generation rates and the daily vehicle miles traveled (VMT) were used to estimate vehicle fuel consumption associated with trips to and from the proposed project. Table 7-2, Project Operational Fuel Consumption provides an estimate of the daily fuel consumed by vehicles traveling to and from the proposed project.

Table 7-2
Operations Fuel Consumption

Vehicle Type	Percent of Vehicle Miles Traveled ¹	Daily Vehicle Miles Traveled ²	Average Fuel Economy (miles per gallon) ³	Total Daily Fuel Consumption (gallons) ⁴
Passenger Cars	53.6	5,130.43	21.6	237.52
Light/Medium Trucks	39.6	3,790.39	17.2	220.37
Heavy Trucks/Other	6.8	650.88	6.1	106.70
Total	100.0	9,571.70	--	564.59
Notes: 1 – Percent of Vehicle Miles Traveled distribution derived from Appendix H1, Air Quality Impact Analysis. 2 – Daily Vehicle Miles Traveled obtained from Appendix H1, Air Quality Impact Analysis. 3 – Average fuel economy derived from the Department of Transportation. 4 – Total Daily Fuel Consumption calculated by dividing the daily vehicle miles traveled by the average fuel economy (i.e., 4,183.57/21.6)				

As shown in Table 7-2, the operation of proposed project is estimated to consume approximately 564.59 gallons of fuel per day. However, the proposed project would not result in any unusual characteristics that would result in excessive long-term operational fuel consumption. The proposed project would involve operations typical of residential communities, requiring primarily passenger vehicle trips to and from work, school, recreational activities, and typical errands. Fuel consumption associated with vehicle trips generated by the proposed project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar residential developments in the region.

Other Non-Motorized Transportation Options

The project vicinity is currently served by Santa Clarita Transit local east-west Route 6 and the Metrolink Antelope Valley Line (Via Princessa Station). Additionally, bicycle lanes would be incorporated into the project design, and the proposed project is in the vicinity of multiple recreational trails. The proximity of the project site to alternative modes of transportation would reduce the number of trips associated with the proposed project. The proposed project would not result in the inefficient, wasteful, or unnecessary consumption of transportation energy.

Building Energy Demand

The proposed project would be expected to demand 557.02 megawatt hours (MWh) of electricity per year and 659,835 cubic feet of natural gas per month. These figures were obtained from Section 5.5, Greenhouse Gas Emissions.



The proposed project would involve operations typical of a waste collection and management facility, requiring electricity and natural for typical lighting, climate control, and day-to-day activities. Additionally, as stated in Table 5.5-2, Project Consistency with Attorney General's Recommendations in Section 5.5, Greenhouse Gas Emissions, the proposed project would incorporate several energy efficiency measures, including land use, transportation, energy, water conservation, and solid waste measures. Therefore, the proposed project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar residential developments in the region.

Energy Efficiency Measures

Title 24, California's Energy Efficiency Standards for Residential and Non-residential Buildings, was established by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. In 2010, the CEC updated *Title 24* standards with more stringent requirements. The 2010 Standards are expected to substantially reduce the growth in electricity and natural gas use. Additional savings result from the application of the 2010 Standards on building alterations. For example, requirements for cool roofs, lighting, and air distribution ducts are expected to save about additional of electricity. These savings are cumulative, doubling as years go by.

In addition to energy efficiency measures required by *Title 24*, the proposed project would comply with the *2010 California Green Building Code* (effective January 1, 2011), which would allow the project to obtain green building certification from the State as well as Leadership in Energy and Environmental Design (LEED) registration. Mitigation Measure GHG-1 requires the project applicant to implement GHG-reducing project design features into the proposed project, and Mitigation Measure GHG-2 requires the project's Homeowner's Association (HOA) to include several energy-efficient requirements in order to reduce GHG emissions. The proposed project would adhere to all Federal, State, and local requirements for energy efficiency, including the *Title 24* standards and *2010 California Green Building Code* requirements. Therefore, the proposed project would not result in the inefficient, wasteful, or unnecessary consumption of building energy.