CHAPTER SIX

OTHER CEQA REQUIREMENTS

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6.1 Significant Unavoidable Environmental Effects

The CEQA Guidelines, Section 15126.2(b), requires a description of any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, not withstanding their effect, should be described. The project was evaluated with respect to specific resource areas to determine whether implementation would result in significant adverse impacts.

The potentially significant environmental impacts that would result from implementation of the proposed project are summarized in Table ES-1 in the Executive Summary of this Draft EIR. In some cases, impacts that have been identified would be less than significant. In other instances, incorporation of the mitigation measures proposed in this Draft EIR would reduce the impacts to levels that are less than significant. Although the proposed project contains policies and guidelines that mitigate certain impacts, no mitigation measures have been identified to reduce the following impacts to a less-than-significant level. Those impacts that cannot feasibly be mitigated to a less-than-significant level, or for which no mitigation measures are available, would remain as significant unavoidable adverse impacts, as described below.

6.1.1 AIR QUALITY

Impact 3.3-1 – Conflict with or obstruct implementation of any applicable air quality plan. The proposed project may conflict or obstruct implementation of the applicable AQAP. Impacts would be *potentially significant*. There are no feasible mitigation measures that can be applied to the project to reduce the impact to a less-than-significant level; accordingly, this impact would be ***significant and unavoidable.***

Impact 3.3-2 – Violate any air quality standard or contribute substantially to an existing or projected air quality violation. The project would exceed the SJVAPCD's regional thresholds during construction and operation for NOx; therefore, this would be considered a potentially significant impact. The project may contribute to a violation of ozone standards and nitrogen dioxide standards; this would be considered a potentially significant impact. There are no feasible mitigation measures that can be applied to the project to reduce the impact to a less-than-significant level; accordingly, this impact would be ***significant and unavoidable***.

Impact 3.3-3b – Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable national or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). There are no feasible mitigation measures that can be applied to the project to reduce the impact to a less-than-significant level; accordingly, this impact would be ***significant and unavoidable***.

6.1.2 GREENHOUSE GASES

Impact 3.7-1 – Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Construction emissions would primarily occur prior to 2020, therefore they would be less than significant. Operational emissions would not meet the target thresholds of 29 percent below BAU. Impacts would be ***potentially significant***.

Impact 3.7-2 – Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG. The proposed project may obstruct attainment of the goals established under AB 32. The above mitigation measure would not achieve the required reduction of 29 percent below BAU; therefore, the residual significance of this impact is ***significant and unavoidable***.

6.1.3 NOISE

Impact 3.11-1 – Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The proposed project would not expose people to noise levels in excess of standards established in the County's noise ordinance during construction. Noise impacts from construction would less than significant. However, because the future traffic noise levels along Washington Road between Main Street and the project site would be considered significantly impacted by project-generated traffic, project thresholds of significance at existing residences would be exceeded. A ***significant and unavoidable*** impact would occur.

6.2 Significant Irreversible Environmental Changes

Section 15126.2(c) of the CEQA Guidelines requires an EIR to address significant irreversible environmental effects, which cannot be avoided if the proposed project is implemented.

Where the decision of the public agency allows the occurrence of significant effects which are identified in the Final EIR but are not at least substantially mitigated, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or the information in the record (Section 15093(b)). This statement is called a "Statement of Overriding Considerations." This statement will be prepared at the end of the CEQA review process, after the Final EIR for this project has been completed.

Implementation of the proposed project would result in the short-term commitment of nonrenewable and/or slowly renewable energy resources and natural resources including lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, and water due to construction activities. As the project site develops, nonresidential development would require further commitment of energy resources in the form of natural gas and electricity. Increased motor vehicular travel as a result of the increased commitment of public services would also be required.

Significant impacts resulting from development of the proposed project, for which complete mitigation is unavailable, infeasible, or outside the jurisdiction of Stanislaus County to

implement, are summarized in Section 6.1, Significant Unavoidable Environmental Impacts, and are described in detail in the appropriate subsections in Chapter Three of this Draft EIR.

6.3 Irreversible Changes to the Environment

Implementation of the proposed project would result in the long-term commitment of resources to serve the proposed project site. The most notable significant irreversible impacts are increased generation of air pollutants and noise from additional vehicular traffic. Implementation of the proposed project will also result in the short-term commitment of non-renewable and/or slowly renewable natural and energy resources such as lumber and other forest products, mineral resources, and water resources during construction activities. These irreversible impacts, which are currently unavoidable consequences of urban development, are described in detail in the appropriate sections of Chapter Three of this Draft EIR.

6.4 Growth-Inducing Impacts

Section 15126.2(d) of the CEQA Guidelines requires a discussion of how the potential growth-inducing impacts of the proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Direct population growth occurs when a project would result in the construction of a substantial amount of new housing or otherwise directly cause a substantial increase in a community's population. Indirect growth inducement occurs when a project would extend infrastructure to undeveloped areas, remove obstacles to population growth, or otherwise encourage activities that cause significant environmental effects. Induced growth is distinguished from the direct employment, population, or housing growth of a project. If a project has characteristics that "may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively," then these aspects of the project must be discussed as well. Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place in the absence of the proposed project. For example, a project could induce growth by lowering or removing barriers to growth or by creating or allowing a use such as an industrial facility that attracts new population or economic activity. CEQA Guidelines also indicate that the topic of growth should not be assumed to be either beneficial or detrimental.

6.4.1 DIRECT AND INDIRECT GROWTH INDUCEMENT

A key consideration in evaluating growth inducement is whether the activity in question constitutes "planned growth". A residential project that is consistent with the underlying General Plan and zoning designations would generally be considered planned growth because it was previously contemplated by these long-range documents, and, thus, would not be deemed to have a significant growth-inducing effect. Likewise, a project that requires a General Plan Amendment and re-zone to develop more intense uses than are currently allowed may be considered to have a substantial growth-inducing effect because such intensity was not contemplated by the applicable long-range documents. It should be noted that these are

hypothetical examples, and conclusions about the potential for growth inducement will vary on a case-by-case basis.

6.4.2 DIRECT POPULATION GROWTH

Project implementation will not have a direct growth inducing impact because the project does not include proposed dwellings.

6.4.3 REMOVAL OF BARRIER TO GROWTH

The proposed project would not result in the extension of urban infrastructure to an area that is currently not serviced because the project does not require or propose connection to urban infrastructure. In particular, potable water and sewer service would not be extended to the project site.

Overall, the proposed project is consistent with the land use designations contained in the Stanislaus County General Plan and will not encourage growth that exceeds population projections. Growth inducement, as it pertains to CEQA and this document, generally denotes growth that is not planned for. Given that the proposed project is in compliance with County growth projections, it will not result in significant direct growth-inducing impacts.

6.5 Effects Not Found to be Significant

CEQA Guidelines, Section 15128, states that "an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." During the scoping process for this EIR, it was determined that certain environmental topics cited in the Notice of Preparation (NOP) would not be evaluated in detail; therefore, the Project was analyzed in detail with respect to certain environmental areas described within the Appendix G guidelines and other environmental topics were dismissed from further analysis. To the extent a particular Project feature was not analyzed in detail in any given discussion of an impact area, it is implied that this Project feature did not result in a significant impact.

Results of the comprehensive environmental analysis are presented in Chapter Three of this EIR. Most impacts were found to be either less than significant or below a level of significance after mitigation.

6.6 Energy Conservation

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs, license thermal power plants of 50 megawatts or larger, develop energy technologies and renewable energy resources, plan for and direct state responses to energy emergencies, and—perhaps most importantly—promote

energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F of the CEQA Guidelines. Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. For the reasons set forth below, this EIR concludes that the proposed project will not result in the wasteful, inefficient, and unnecessary consumption of energy, will not cause the need for additional natural gas or electrical energy-producing facilities, and, therefore, will not create a significant impact on energy resources.

6.6.1 REGULATORY SETTING

Federal and state agencies regulate energy use and consumption through various means and programs. At the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency are three federal agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. At the state level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields. The CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting state fuel economy standards for new on-road motor vehicles. Some of the more relevant federal and state energy-related laws and plans are discussed below.

Federal Energy Policy and Conservation Act

The Federal Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the United States Department of Transportation, 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. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 miles per gallon. 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 on the basis of each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. The Corporate Average Fuel Economy (CAFE) program, which is administered by United States Environmental Protection Agency, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The United States Environmental Protection Agency

calculates a CAFE value for each manufacturer, based on city and highway fuel economy test results and vehicle sales. On the basis of the information generated under the CAFE program, the United States Department of Transportation is authorized to assess penalties for noncompliance. In the course of its over 30-year history, this regulatory program has resulted in vastly improved fuel economy throughout the nation's vehicle fleet.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) such as ABAG were required to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process for specific projects would then address these policies. Another requirement was to consider the consistency of transportation planning with federal, State, and local energy goals. Through this requirement, energy consumption was expected to become a decision criterion, along with cost and other values that determine the best transportation solution.

The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicle miles traveled, and accommodating pedestrian and bicycle access.

Title 24, Energy Efficiency Standards

Title 24, which was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, since the energy efficiency standards went into effect in 1978, it is estimated that California residential and nonresidential consumers have reduced their utility bills by at least $15.8 billion. The CEC further estimates that by 2011, residential and nonresidential consumers will save an additional $43 billon in energy costs.

In 2008, the CEC adopted new energy efficiency standards. All projects that apply for a building permit after January 1, 2010 must adhere to the new 2008 standards. A copy of the 2008 Energy Efficiency Standards may be reviewed online at www.energy.ca.gov/title24/2008standards /index/html. The 2008 Energy Efficiency Standards may also be reviewed at the Energy Efficiency Division, California Energy Commission, 1516 Ninth Street, MS-29, Sacramento, CA 95814-5512.

Because the adoption of Title 24 post-dates the adoption of AB 1575, it has generally been the presumption throughout the State that compliance with Title 24 (as well as compliance with the federal and state regulations discussed above) ensures that projects will not result in the inefficient, wasteful, and unnecessary consumption of energy. As is the case with other uniform building codes, Title 24 is designed to provide certainty and uniformity throughout the State while ensuring that the efficient and non-wasteful consumption of energy is carried out through design features. Large infrastructure transportation projects that cannot adhere to Title 24 design-build performance standards may, depending on the circumstances, undertake a more involved assessment of energy conservation measures in accordance with some of the factors set forth in Appendix F of the CEQA Guidelines. As an example, pursuant to the California Department of Transportation CEQA implementation procedures and FHWA Technical Advisory 6640.8A, a detailed energy study is generally only required for large-scale infrastructure projects. However, for the vast majority of residential and nonresidential projects, adherence to Title 24 is deemed necessary to ensure that no significant impacts occur from the inefficient, wasteful, and unnecessary consumption of energy. As a further example, the adoption of federal vehicle fuel standards, which have been continually improved since their original adoption in 1975, have also protected against the inefficient, wasteful, and unnecessary use of energy.

According to the CEC, reducing energy use has been a benefit to all. Building owners save money, Californians have a more secure and healthy economy, the environment is less negatively impacted, and our electrical system can operate in a more stable state. The 2008 Standards (for residential and nonresidential buildings) are expected to reduce the growth in electricity use by 561.2 gigawatt-hours per year (GWh/y) and reduce the growth in natural gas use by 19 million therms per year (therms/y). The savings attributable to new nonresidential buildings are 151.2 GWh/y of electricity savings and 3.3 million therms. Additional savings result from the application of the Standards on building alterations, outdoor lighting, and refrigerated warehouses. In particular, non-residential alteration requirements for cool roofs, insulation, and interior lighting are expected to save about 270.5 GWh/y of electricity. Outdoor

lighting and refrigerated warehouse requirements are expected to save an additional 37.3 GWh/y of electricity. These savings will accumulate as the Standards affect each subsequent year of construction—doubling in two years, tripling in three, etc. Table 6.6-1 provides a summary of the electricity savings envisioned by the 2008 standards.

Table 6.6-1
Electricity Savings Projected from the 2008 Standards

Category		2005 Standard (GWh)	2008 Standard (GWh)	Savings (GWh)	Percent Reduction
Newly Constructed Buildings	Nonresidential Heating	33.0	21.0	12.0	37.2
	Nonresidential Cooling	392.0	360.0	32.0	8.3
	Nonresidential Lights	822.0	726.0	96.0	11.7
	Nonresidential Fans	646.0	636.0	10.0	1.5
Alterations	Interior Lighting	NA	NA	186.0	NA
	Cool roofs and Insulations	NA	NA	84.5	NA
Newly Constructed Buildings	Refrigerated Warehouses	NA	NA	15.6	NA
	Outdoor Lighting	NA	NA	21.7	NA
Total		**NA**	**NA**	**561.2**	**NA**

Source: California Energy Commission, 2007.
Notes: GWh = Gigawatt hours, NA = not applicable, and refrigerated warehouses were previously unregulated

Since the California 2000–2001 electricity crisis, the CEC has placed greater emphasis on demand reductions. Changes in 2001 (following the electricity crisis) reduced electricity demand for newly constructed residential and nonresidential buildings by about 110.3 megawatts (MW) each year. Newly constructed nonresidential buildings account for 44.0 MW of these savings. Like energy savings, demand savings accumulate each year. The 2008 Standards are expected to reduce electric demand by another 131.8 MW each year. Table 6.6-2 provides a summary of the demand savings envisioned by the 2008 standards.

In many parts of the world, the wasteful and poorly managed use of energy has led to oil spills, acid rain, smog, and other forms of environmental pollution that have ruined the natural beauty people seek to enjoy. California is not immune to these problems, but the CEC-adopted appliance standards, building standards, and utility programs that promote efficiency and conservation have gone a long way toward maintaining and improving environmental quality. Other benefits include reduced destruction of natural habitats, which, in turn, helps protect wildlife, plants, and natural systems.

Many experts believe that burning fossil fuel is a major contributor to global warming; carbon dioxide is being added to an atmosphere already containing 25 percent more than it did two centuries ago. Carbon dioxide and other greenhouse gases create an insulating layer around the Earth that leads to global climate change. CEC research shows that most of the sectors of the

State economy face significant risk from climate change, including agriculture, forests, and the natural habitats of a number of indigenous plants and animals.

Table 6.6-2
Demand Savings Projected from the 2008 Standards

Category		2005 Standard (MW)	2008 Standard (MW)	Savings (MW)	Percent Reduction
Newly Constructed Buildings	Nonresidential Heating	1.0	1.0	38.2	—
	Nonresidential Cooling	215.0	195.0	9.3	—
	Nonresidential Lights	144.0	120.0	16.4	—
	Nonresidential Fans	136.0	132.0	2.9	—
Alterations	Interior Lighting	NA	NA	45.4	NA
	Cool roofs and Insulations	NA	NA	NA	NA
Newly Constructed Buildings	Refrigerated Warehouses	NA	NA	1.8	NA
	Outdoor Lighting	NA	NA	NA	NA
Total		**NA**	**NA**	**131.8**	**NA**

Source: California Energy Commission, 2007.
Notes: GWh = Gigawatt hours, NA = not applicable, and refrigerated warehouses were previously unregulated

Scientists recommend that actions be taken to reduce emissions of carbon dioxide and other greenhouse gases. While adding scrubbers to power plants and catalytic converters to cars are steps in the right direction (both of which are currently enforced as part of existing regulatory schemes), the use of energy-efficient standards can be effective actions to limit the carbon dioxide that is emitted into the atmosphere. According to the CEC, using energy efficiently, in accordance with Title 24 Energy Efficiency standards, is a proven, far-reaching strategy that can and does present an important contribution to the significant reduction of greenhouse gases.

Pursuant to the California Building Standards Code and the Title 24 Energy Efficiency Standards, the City will review the design and construction components of the project's Title 24 compliance when specific building plans are submitted.

6.6.2 ENERGY REQUIREMENTS OF THE PROPOSED PROJECT

Short-term construction and long-term operational energy consumption are discussed below.

Short-term Construction

The United States Environmental Protection Agency (EPA) regulates non-road diesel engines. The EPA has no formal fuel economy standards for non-road (e.g., construction) diesel engines but does regulate diesel emissions, which indirectly affects fuel economy. In 1994, EPA adopted the first set of emissions standards (Tier 1) for all new non-road diesel engines greater than 37 kilowatts (50 horsepower). The Tier 1 standards were phased in for different engine sizes

between 1996 and 2000, reducing nitrogen oxide (NOx) emissions from these engines by 30 percent. The EPA has since adopted more stringent emission standards for NOx, hydrocarbons, and particulate matter from new non-road diesel engines. This program includes the first set of standards for non-road diesel engines less than 37 kW. It also phases in more stringent Tier 2 emission standards from 2001 to 2006 for all engine sizes and adds yet more stringent Tier 3 standards for engines between 37 and 560 kW (50 and 750 hp) from 2006 to 2008. These standards will further reduce non-road diesel engine emissions by 60 percent for NOx and 40 percent for particulate matter (PM) from Tier 1 emission levels. In 2004, EPA issued the Clean Air Non-road Diesel Rule. This rule, which took effect in 2008 and will be fully phased in by 2014, will cut emissions from non-road diesel engines by more than 90 percent. These emission standards are intended to promote advanced clean technologies for non-road diesel engines that improve fuel combustion, but they also result in slight decreases in fuel economy.

The proposed project is anticipated to be constructed in three phases with groundbreaking occurring as early as 2013. The first phase of construction will be completed by 2016. Build out is expected to be completed by 2019. However, as mentioned in the Air Quality Report, to provide a "worst-case" scenario, the project's construction was conservatively estimated to be built out simultaneously within a year following entitlement approvals. It was assumed that the project's construction would start in June 2013 and be completed by July 2014. Table 6.6-3 provides an estimate of the project construction fuel consumption. The construction assumptions contained in the table are the same assumptions in the construction air quality analysis in Section 3.3 Air Quality.

Table 6.6-3
Construction Fuel Consumption

Year	Phase Duration	Construction Phase Assumptions	Total Fuel Consumption	
			Per 8 Hours (gallons)	Total Phase Duration (gallons)
2013	10 days	Site Preparation of 61.7acres (grubbing and land clearing)		
		Equipment:		
		• Rubber Tired Dozers (6)	854.4	8,544
		• Tractors/Loaders/Backhoes (8)	416	4,160
2013	30 days	Site Grading of 61.7acres		
		Equipment:		
		• Excavators (4)	156.8	4,704
		• Graders (2)	75.2	2,256
		• Rubber Tired Dozers (2)	284.8	8,529
		• Scrapers (4)	531.2	15,936
		• Tractors/Loaders/Backhoes (4)	150.8	4,524
2013/2014	190 days	Construct 180,000 square feet of warehouse facilities		
		Equipment:		
		• Cranes (2)	168	31,350
		• Forklifts (6)	177.6	33,744
		• Generator Sets (2)	25.6	4,864

Year	Phase Duration	Construction Phase Assumptions	Total Fuel Consumption	
			Per 8 Hours (gallons)	Total Phase Duration (gallons)
		• Tractors/Loaders/Backhoes (6)	225.6	42,864
		• Welders (2)	13.5	2,565
2014	25 days	Asphalt Paving Equipment:		
		• Pavers (4)	160	4,000
		• Paving Equipment (4)	112	2,800
		• Rollers (4)	144	3,600
		• Tractors/Loaders/Backhoes (2)	75.2	1,880
2014	25 days	Paint Buildings Equipment:		
		• Air Compressors (2)	N/A	
Total				**176,320**

Source: CATERPILLAR, 1998; CATERPILLAR, 2013; KOBELCO, 2005; Diesel Service & Supply, 2013.
Note: To account for a worst case scenario, most equipment is Tier 3.
Note: Data for paving equipment and rollers comes from the 1998 edition CATERPILLAR handbook.
Note: Fuel data for forklifts could not be find so was substituted with Telehandler data which is comparable.
Note: Generator fuel usage based on a 20 kW generator.
Note: Based on 300 SSD Welder generator (3.2 Ltr per hour = 0.8454 gallons per hour).

As shown in Table 6.6-4, construction activities associated with the proposed project would be estimated to consume 176,320 gallons of diesel. 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 other parts of California. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Long-Term Operations

TRANSPORTATION ENERGY DEMAND

Vehicle fuel efficiency is regulated at the federal level. Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. As mentioned before, The fuel economy standard for new passenger cars has been 27.5 miles per gallon since 1990. The fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 miles per gallon since 1996. 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 on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Trip generation figures provided in the Traffic Impact Study prepared for the project were used to estimate vehicular fuel consumption associated with trips to and from the proposed project. Table 6.6-4 provides an estimate of the daily fuel consumed by vehicles traveling to and from the

proposed project. These estimates were derived using the same assumptions used in the operational air quality analysis in Section 3.3 of this draft EIR.

Table 6.6-4
Daily Vehicle Fuel Consumption

Vehicle Type	Percent of Trips	Number of Daily Trips	Trip Length (miles)	Total Daily Miles	Average Fuel Economy	Total Daily Fuel Consumption (gallons)
Employees (Passenger Vehicles)	54.4	446.1	8	3,568.8	21.6	165.2
Field Trucks (Heavy-Duty Diesel Trucks)	15.6	127.5	16.5	2,103.8	6.1	344.9
Warehouse to Distribution Center Trips Northern Boundary (Heavy-Duty Diesel Trucks)	7.1	58.0	222	12,876	6.1	2,110.8
Warehouse to Distribution Center Trips Southern Boundary (Heavy-Duty Diesel Trucks)	7.1	58.0	60	3,480	6.1	570.5
Material Delivery (Medium –Heavy-Duty Vehicles)	2.0	16.3	8	130.4	6.1	21.4
Local Sales	13.6	111.1	8	888.8	21.6	41.1
Total	**100**	**817**	**-**	**23,047.80**	**-**	**3,253.9**

Source: Quad Knopf, 2013.
Note: Material delivery consists of bins, pallets, cartons.
Note: Data is based on 817 trips as reported in the Traffic Study completed on October 11, 2013, and in the Air Quality Study (Table 4) completed on January 28, 2013.
Note: Employee, material delivery, and local sales are assumed to originate from the City of Turlock (approximately 8 miles round trip).

According to the results listed in the table, the total daily fuel consumption for the project will be 3,253.9 gallons. The proposed project would fuel some of the hauling trucks onsite. Workers would likely fuel up in Turlock before arriving onsite, or at the nearest gas station which is approximately 2.3 miles away. Accordingly, vehicular fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than for any other similar land use in the region.

BUILDING ENERGY DEMAND

The proposed project's structures would be designed to comply with the County's Building Code and as previously stated, all projects that apply for a building permit after January 1, 2010 must adhere to the new Title 24 2008 standards.