

**Appendix D1: AES Highgrove 300 MW Project
12700 Taylor St, Grand Terrace**

Environmental Topic	Impact(s)	Mitigation	Conclusion
Aesthetics (Visual Resources) - Construction	<p>PROJECT SPECIFIC: During construction, construction materials, construction equipment, trucks, and parked vehicles may be visible on the project site. Construction activities would be conducted in a manner that would reduce dust from leaving the project site. The construction activities on the project site and the activities in the laydown areas would not contrast in a significant way with the existing industrial character of the area. During the construction period, the boundaries of the project site and laydown areas that border Taylor Street will be screened using chain link fencing covered with a screening fabric or Privamax. During construction of the pipeline, the ground surface of the areas in the alignment will be temporarily disrupted by the presence of construction equipment, excavated piles of dirt, concrete, and pavement, and construction personnel and vehicles. Any visual changes associated with construction period activities would be minor and temporary, and thus not significant.</p> <p>CUMULATIVE: The proposed project is one of several proposed development plans occurring in the project vicinity over the next several years, including the proposed Colton Joint Unified School District High School #3, and City of Grand Terrace's commercial and retail development (Outdoor Adventures Center).</p>	No significant visual impacts will result from implementation of the proposed project, therefore, no mitigation measures are proposed.	Less than significant.
Aesthetics (Visual Resources) - Operation	<p>PROJECT SPECIFIC: The most prominent features of the AES Highgrove Project will be the exhaust stacks that will be 80 feet tall from the plant's base, which is approximately 10 feet below the grade of Taylor Street. The new project will include a berm, wall and landscaping to further reduce visibility from Taylor Street. In addition, the Project will include demolition of the old generating station equipment. The existing generating station has an aged appearance and uses steam generation technology, which is characterized by tall prominent steel boiler structures and large cooling towers. The facility, built in the 1950s before Grand Terrace was incorporated, was constructed with minimal screening and minimal setback from Taylor Street. Therefore, demolition of the existing facility will improve the aesthetic environment along Taylor Street.</p> <p>CUMULATIVE: Although the proposed project in combination with the other planned land uses will change the overall appearance of this area, these changes will not adversely affect identified scenic resources or protected scenic corridors and are not anticipated to degrade the area's current level of visual quality.</p>	No significant visual impacts will result from implementation of the proposed project, therefore, no mitigation measures are proposed.	Less than significant.

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Agricultural (and Soil) Resources - Construction	<p>PROJECT SPECIFIC: Construction of the project will be limited to the previously developed property. With the exception of the gas line and the potable water line, the linears are located adjacent to the site. The natural gas supply pipeline will be almost entirely limited to existing roadways and rights-of-way. As such, the proposed project will not remove any land from agriculture. Project construction could potentially cause increased compaction of onsite soils in areas needed for facilities such as foundations, footings or onsite pipelines. In addition, the proposed project could result in a slight increase in soil erosion by water or wind. If this impact is not controlled, it could possibly increase the sediment load within surface waters downstream of the construction site or adversely impact local air quality from fugitive dust.</p> <p>CUMULATIVE: The site is current zoned for [M2] Industrial uses and has been previously developed for use for electrical power generation. For this reason, the potential cumulative impact of the project is considered to be less than significant to soil resources and will have no impact on agricultural resources.</p>	<p>Erosion control measures would be required during construction to help maintain water quality, protect property from erosion damage, and prevent accelerated soil erosion or dust generation that could adversely affect local surface water or air quality. Temporary erosion control measures would be installed before construction begins, maintained and evaluated during construction, and then, would be removed from the site after the completion of construction.</p>	<p>Mitigated to less than significant.</p>
Agricultural (and Soil) Resources - Operation	<p>PROJECT SPECIFIC: Operation of the project will be limited to the previously developed property. Project operation would not result in impacts to the soil from erosion or compaction. Routine vehicle traffic during project operation would be limited to existing paved roads. Standard operating activities would not involve the disruption of soil. Impacts to soil from project operations would be less than significant.</p> <p>CUMULATIVE: The site is current zoned for [M2] Industrial uses and has been previously developed for use for electrical power generation. For this reason, the potential cumulative impact of the project is considered to be less than significant to soil resources and will have no impact on agricultural resources.</p>	<p>Permanent erosion control measures on the site could include drainage and infiltration systems, detention basins, slope stabilization, and long-term revegetation or landscaping. Revegetation or landscaping would follow from planting for short-term erosion control.</p>	<p>Less than significant.</p>
Air Quality - Construction	<p>PROJECT SPECIFIC: Onsite construction emissions would be generated during demolition of existing structures and power plant construction. Onsite emission sources include exhaust emissions from construction equipment and motorized vehicles, and fugitive dust emissions. Offsite construction emissions would be generated during construction of the natural gas pipeline and potable water line, and offsite motorized vehicle travel resulting from demolition and power plant construction. Offsite emission sources include the exhaust emissions from construction equipment and motorized vehicles used to install the project-related linears</p>	<p>The Highgrove Project proposes to implement the standard construction mitigation measures developed by the CEC to mitigate construction air quality impacts expected during construction.</p>	<p>Mitigated to less than significant.</p>

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	<p>(i.e., the natural gas and potable water lines), as well as the exhaust emissions from motor vehicles traveling to and from the proposed work site. Minor amounts of fugitive dust would also be generated from construction activities and from vehicle travel on roadways.</p> <p>CUMULATIVE: Cumulative impact analysis not complete yet.</p>		
Air Quality - Operation	<p>PROJECT SPECIFIC: Operational emission estimates were prepared for the startup and shutdown mode and the steady state operating mode including cooling tower and turbine emissions. Natural gas will be the only fuel consumed during plant operation; no distillate fuel oil firing. The project is expected to emit small quantities of TACs and noncriteria pollutants (ammonia).</p> <p>CUMULATIVE: Cumulative impact analysis not complete yet. The Applicant received a listing of 53 potential cumulative impact sources from the SCAQMD that have submitted permit applications to the SCAQMD or those that have received permits but are not yet in operation. The Applicant and the CEC staff will review the list and determine the appropriate scope of the cumulative modeling analysis. Furthermore, a review of the SCAQMD’s CEQA projects did not identify any projects within six miles of the project site. A review of the City of Grand Terrace and the County of San Bernardino planning departments did not identify any Notices of Preparation for projects that would be expected to emit significant operational emissions (refineries, power plants, engine generators, etc.).</p>	<p>Mitigation will be provided for all emission increases from the project in the form of offsets (either ERCs or RTCs) and the installation of BACT, as required under SCAQMD regulations. Through the use of BACT/LAER to control air pollutant emissions, the acquisition of ERCs/RTCs as described in confidential submittal under separate cover accompanying the AFC, combined with the results of the air quality impact analysis, the project will not result in significant air quality impacts. Therefore no additional operational mitigation is necessary beyond the offsets that will be provided in accordance with SCAQMD requirements.</p>	Mitigated to less than significant.
Biological Resources – Construction	<p>PROJECT SPECIFIC: Construction of the Highgrove project site would permanently remove four acres of previously disturbed ruderal habitat (Figure 8.2-3a). The quality of the land as wildlife habitat is marginal but could be used seasonally by foraging birds and small mammals. Removal of non-native or degraded native habitats may result in direct mortality to wildlife using the site, such as ground squirrels. Suitable nesting habitat occurs for songbirds in the trees adjacent to the site. Nesting areas for raptors may also be found in the riparian habitat areas along the gas pipeline. The loss of common wildlife from vegetation removal at the site would not represent a significant impact under CEQA, as these species are regionally common. The proposed gas pipeline would be installed within the existing paved roadway and road shoulders through industrial, residential, commercial, and agricultural areas.</p> <p>CUMULATIVE: The Highgrove Project would not cause any new habitat disturbance from construction of the site. Because the proposed site was</p>	<p><i>The following measures would be implemented in construction areas:</i></p> <ul style="list-style-type: none"> • Provide worker environmental awareness training (WEAT) for all construction personnel that identifies the sensitive biological resources and measures required to minimize project impacts during construction. • Avoid sensitive habitats and species during construction by developing construction exclusion zones and fencing around sensitive areas. • Conduct additional preconstruction surveys for sensitive species in potential impact areas during the spring before construction begins, including burrowing 	Mitigated to less than significant.

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	<p>previously developed and is located in an industrial area, no significant individual or cumulative impacts would occur. The associated gas pipeline for the project would be located in areas that have been previously disturbed and would not result in the permanent loss of habitat or cause significant adverse impacts to biological resources individually or cumulatively.</p>	<p>owls, or breeding birds if vegetation removal during the nest season is unavoidable.</p> <ul style="list-style-type: none"> • Preconstruction surveys would be conducted prior to nesting season to remove potential nest substrate (shrubs, trees as necessary, and tall vegetation) and install silt fence to keep snakes and ground dwellers out of the site. <p><i>The following protection measures will be implemented during construction activities.</i></p> <ol style="list-style-type: none"> 1. clear vegetation that could be used as nesting substrate in impact areas before the bird breeding season or after birds have fledged from the nest. 2. Conduct preconstruction nesting surveys in the spring to determine if any habitat in the construction areas is occupied by nesting birds. Implement mitigation measures that protect nesting birds by coordinating work activities during non-nesting periods or ceasing work within 200 feet (500 feet for raptors) of an active bird nest or monitoring the nest during activities to determine if disturbance is adversely affecting reproduction. Preconstruction field surveys to identify active burrowing owl nest sites will be conducted prior to construction activities. If active nest sites are found, protection measures will be implemented. 3. Design “raptor-friendly” electric transmission lines, as described in <i>Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996</i> (APLIC, 1996) with conductor wire spacing greater than the 	

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		<p>wingspans of large to prevent electrocutions.</p> <p>4. Provide safety lighting that points downward to reduce avian collisions.</p> <p><i>The following protective measures are proposed to avoid impacts to aquatic resources:</i></p> <ol style="list-style-type: none"> 1. Avoid the Riverside Canal, Gage Canal, Springbrook Wash, and downstream reaches of the Santa Ana River habitats, with modifications to gas pipeline design that include use of a trenchless construction method or constructing during the dry season. 2. Obtain a Streambed Alteration Agreement for activities (that includes protection measures for biological resources downstream). Develop a contingency plan for the potential inadvertent return of drilling mud into waterways during drilling activities. 3. Implement extensive erosion control in the temporary impact areas, especially near drainages and waterways. 	
Biological Resources - Operation	<p>PROJECT SPECIFIC: Cooling towers concentrate the particulates (total dissolved solids) during the cooling process and produce a mist that contains higher total dissolved solids or salt than potable water typically contains. These salts can physically damage a leaf cell, which affects the photosynthetic ability of plants.</p> <p>CUMULATIVE: Not identified in document</p>	None identified in document.	Less than significant.
Cultural Resources and Paleontology - Construction	<p>PROJECT SPECIFIC: No historic or archaeological sites were recorded or otherwise discovered to be present within the direct area of impact of the Plant site and associated gas pipeline alignment alternatives. The field survey of the proposed plant site and laydown area resulted in negative findings. No prehistoric or historic archaeological remains were detected from surface examination of exposed soils. No historically or architecturally significant buildings or structures are present within the area of direct impact. The site has been heavily modified, as large holding tank</p>	Although significant archaeological and historical sites were not found during project field survey, it is possible that subsurface construction could encounter buried archaeological remains. For this reason, measures to mitigate any potential adverse impacts that could occur if there were an inadvertent discovery of buried	Mitigated to less than significant.

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	<p>structures associated with the former Highgrove Generating Station were located here. There will be no impact to cultural resources as a result of construction at the Plant site. Construction confined within the existing city streets will not affect the historic built environment.</p> <p>CUMULATIVE: Because the Highgrove Project would not affect known significant cultural resources, it would not likely cause significant cumulative impacts. If construction were to encounter a large, stratified, buried prehistoric archaeological site or discrete filled-in historic period features, the possibility of cumulative impacts would arise because such sites might be highly significant, and many have been destroyed or damaged by agricultural activity and/or commercial/industrial/residential development in the project vicinity. Given the relative low level of impact to such a site that the project would cause, it is also possible that proposed project activities would not lead to significant cumulative impacts, depending on the extent of project impact to any such discovered archaeological deposits. Any potential impact to an unknown site would be minimized by a stop-work procedure if a site were uncovered. No impacts on architectural resources are expected to occur.</p>	<p>cultural resources were proposed. These measures include: (1) designation of a cultural resources specialist to be on-call to investigate any cultural resources finds made during construction; (2) implementation of a construction worker training program; (3) monitoring during initial clearing of the power plant site; (4) procedures for halting construction in the event that there is an inadvertent discovery of archaeological deposits or human remains; (5) procedures for evaluating an inadvertent archaeological discovery; and (6) procedures to mitigate adverse impacts on any inadvertent archaeological discovery determined significant.</p>	
Cultural Resources and Paleontology - Operation	Not identified in document	None identified in document	Not identified in document
Energy	Not evaluated in document	None identified in document	Not identified in document
Geology - Construction	<p>PROJECT SPECIFIC: Ground-shaking and liquefaction present the most significant geologic hazard to the proposed Highgrove project site. Construction will require minor grading and excavation, thereby altering the terrain of the Highgrove site. Impacts on the geologic conditions involve changes in drainage, cuts, and fills. Since the site is generally level, site grading is not expected to adversely impact the geologic environment.</p> <p>CUMULATIVE: Not identified in document</p>	<p>The Highgrove site and pipelines will need to be designed and constructed to withstand strong earthquake-shaking as specified in the 2001 CBC for Seismic Zone 4. A site-specific geotechnical investigation (forthcoming) will aid in the development of the seismic design criteria. A site-specific geotechnical investigation currently being planned will aid in the full assessment of liquefaction potential and lateral spreading. Expansive soils can be mitigated by removing the soil and backfilling with non-expansive soil, instituting chemical stabilization of the soil, or constructing a foundation</p>	Mitigated to less than significant

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		treatment that resists uplift of the expansive soil.	
Geology - Operation	Not identified in document	None identified in document	Not identified in document
Hazards and Hazardous Materials - Construction	<p>PROJECT SPECIFIC: Hazardous materials to be used during construction of the project will include gasoline, diesel fuel, motor oil, hydraulic fluid, solvents, cleaners, sealants, welding flux, various lubricants, paint, and paint thinner. The quantities of hazardous materials that will be onsite during construction are small and construction personnel will be trained to handle the materials properly. The most likely possible incidents will involve the potential for fuels, oil, and grease dripping from construction equipment. The small quantities of fuel, oil, and grease that might drip from construction equipment will have relatively low toxicity and will be biodegradable. Therefore, the expected environmental impact is minimal.</p> <p>CUMULATIVE: Not identified in document</p>	<p>During facility construction, hazardous materials stored onsite will include small quantities of paints, thinners, solvents, cleaners, sealants, lubricants, and 5-gallon emergency fuel containers and will be replenished as needed.</p>	<p>Mitigated to less than significant</p>
Hazards and Hazardous Materials – Operation	<p>PROJECT SPECIFIC: Several hazardous materials, including one regulated substance, will be stored at the generating site during operation. An RMP will be prepared consistent with the CalARP program requirements. Many of the hazardous materials that will be stored onsite are corrosive and are a threat to humans (particularly workers at the site) if inhaled, ingested, or contacted with the skin. Potential environmental and/or human health effects could be caused by accidental releases, accidental mixing of incompatible chemicals, fires, and injury to facility personnel from contact with a hazardous material. The accidental release of aqueous ammonia might present the most serious potential for effects on the environment and/or human health.</p> <p>CUMULATIVE: The primary potential cumulative impact from the use and storage of hazardous materials will be a simultaneous release from two or more sites of a chemical that will migrate offsite. Potentially, the two or more migrating releases could combine; thereby posing a greater threat to the offsite population than a single release by any single site. Hazardous materials that do not migrate, such as sulfuric acid, would not present a potential cumulative impact. The only hazardous material that has the potential to migrate offsite from the Highgrove Project is ammonia vapor released from spilled aqueous ammonia. Based on the offsite consequences analysis results for the Highgrove, Project ammonia vapor concentrations</p>	<p>The aqueous ammonia storage and handling facilities will be equipped with a tank level monitor, temperature and pressure monitors and alarms, and excess flow and emergency block valves. Secondary containment will be provided. If there is an inadvertent release from the storage tank, the liquid will be contained within the secondary containment structure. All hazardous materials will be handled and stored in accordance with applicable codes and regulations.</p>	<p>Mitigated to less than significant</p>

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	<p>are not expected to occur offsite. In the unlikely event that an aqueous ammonia spill occurred at the Highgrove Project at the same time as a chemical spill at another nearby industrial facility, offsite ammonia levels from the Highgrove Project will not be sufficient to cause cumulative impacts.</p>		
<p>Hydrology and Water Quality - Construction</p>	<p>PROJECT SPECIFIC: During construction of the project, water will be required primarily for dust suppression. This water will be supplied either by onsite wells or from Riverside Highland Water Company. Because of the short duration of construction activities and the relatively limited water requirements of the construction phase of the project, no significant adverse impacts to water supply are expected to result.</p> <p>CUMULATIVE: Cumulative impacts to water resources could occur through the use of groundwater, the contribution of sanitary wastewater, or stormwater runoff. None of these categories of water use is expected to result in significant cumulative impacts to area water resources:</p> <ul style="list-style-type: none"> • Surface Water: The project area is relatively flat and there are no natural surface water features in the vicinity. Implementation of BMPs during construction and operation would avoid the potential for adverse impacts to surface water from the project. • Plant Sewage: The proposed plant will generate 1 AFY of sanitary wastewater that would be discharged to the City of Colton Wastewater Treatment Plant. The cumulative impacts from this additional waste load would not be significant. • Industrial Discharge: The proposed plant will generate 42 AFY of industrial discharge that would be truck-hauled to a SARI disposal station. The cumulative impacts from this additional waste load would not be significant. • Groundwater: The project's groundwater requirements of 358 AFY are a very small portion of the overall water demands from the Riverside Basin and would not be significant and, therefore, would cause no adverse impacts to groundwater resources. • Stormwater: Implementation of the project would increase runoff on up to 9.8 acres, due to impervious surfaces. The impacts of the increased runoff will be mitigated through the use of an onsite stormwater detention pond designed to contain the discharge of stormwater. 	<p>In accordance with regulatory requirements to prepare a Stormwater Pollution Prevention Plan (SWPPP) and an Erosion and Sediment Control Plan, the project would implement BMPs during construction to avoid contamination of any groundwater or surface waters.</p>	<p>Mitigated to less than significant</p>
<p>Hydrology and Water Quality - Operation</p>	<p>PROJECT SPECIFIC: Anticipated to use approximately 358 acre-feet per year of water for process and domestic water needs including cooling tower makeup, evaporative cooling, irrigation, NOx water injection and potable use. Unlike a combined-cycle power plant, the Highgrove Project</p>	<p>Along with the SWPPP to minimize groundwater use, the project would recover wastewater sources from other uses within the plant and use these</p>	<p>Mitigated to less than significant</p>

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	<p>will use a relatively small amount of water for power plant cooling. Approximately 60 percent of the total amount of water required to generate electricity will be used for power plant cooling. There are no significant natural surface waters in the project vicinity. The project would not substantially alter existing drainage patterns. Therefore, the project would cause no substantial erosion or siltation on- or offsite. The main source of process and make-up water would be groundwater from an onsite well.</p> <p>CUMULATIVE: Cumulative impacts to water resources could occur through the use of groundwater, the contribution of sanitary wastewater, or stormwater runoff. None of these categories of water use is expected to result in significant cumulative impacts to area water resources:</p> <ul style="list-style-type: none"> • Surface Water: The project area is relatively flat and there are no natural surface water features in the vicinity. Implementation of BMPs during construction and operation would avoid the potential for adverse impacts to surface water from the project. • Plant Sewage: The proposed plant will generate 1 AFY of sanitary wastewater that would be discharged to the City of Colton Wastewater Treatment Plant. The cumulative impacts from this additional waste load would not be significant. • Industrial Discharge: The proposed plant will generate 42 AFY of industrial discharge that would be truck-hauled to a SARI disposal station. The cumulative impacts from this additional waste load would not be significant. • Groundwater: The project’s groundwater requirements of 358 AFY are a very small portion of the overall water demands from the Riverside Basin and would not be significant and, therefore, would cause no adverse impacts to groundwater resources. • Stormwater: Implementation of the project would increase runoff on up to 9.8 acres, due to impervious surfaces. The impacts of the increased runoff will be mitigated through the use of an onsite stormwater detention pond designed to contain the discharge of stormwater. 	<p>sources as water supply to the cooling tower. In addition, the cooling tower water, concentrated through evaporative cooling losses, would be operated at high cycles of concentration to minimize blowdown and limit makeup water needs.</p>	
Land Use and Planning - Construction	Not identified in document	None identified in document	Not identified in document
Land Use and Planning - Operation	<p>PROJECT SPECIFIC: The proposed power plant constitutes a permitted use in the industrial zoning district and is therefore consistent with the City of Grand Terrace’s General Plan and Zoning Ordinance. The power plant would not: physically divide an established community, would not conflict with any applicable habitat conservation plan or natural community conservation plan. The proposed transmission line, water line, and natural</p>	<p>Because no significant impacts have been identified, no mitigation is required.</p>	No impact

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	<p>gas pipeline would not have a significant impact on land uses of the surrounding area. The natural gas supply and potable water supply pipelines would be underground, so would not limit the continued uses of these areas for their currently designated uses. The proposed project is consistent with the goals and policies of applicable plans. The proposed project will not impact or conflict with other nearby land uses within the cities of Grand Terrace or Riverside, or Riverside County.</p> <p>CUMULATIVE: The proposed project is consistent with the City of Grand Terrace's, City of Riverside's, and Riverside County's goals, objectives, and policies for industrial development. The proposed power plant would be sited in an area zoned for such purposes on land that was previously developed into a similar use. The proposed project is consistent with the current land use designation and zoning district for the site. Potential impacts to other environmental resources are discussed throughout the document, and are mitigated where impacts are deemed to be significant.</p>		
Mineral Resources	Not evaluated in document	None identified in document	Not identified in document
Noise - Construction	<p>PROJECT SPECIFIC: Construction of the project is expected to be typical of other power plants in terms of schedule, equipment used, and other types of activities. The noise level will vary during the construction period, depending upon the construction phase: (1) demolition, site preparation, and excavation; (2) concrete pouring; (3) steel erection; (4) mechanical; and (5) clean-up.</p> <p>CUMULATIVE: Not identified in document</p>	<p><i>The following additional mitigation measures are proposed for the project to ensure no adverse noise impacts occur during construction.</i></p> <ul style="list-style-type: none"> • project owner shall establish a telephone number for use by the public to report any significant undesirable noise conditions. • project owner shall document, investigate, evaluate, and attempt to resolve all legitimate project-related noise complaints • noisy construction work at the plant site (that causes offsite annoyance as evidenced by the filing of a legitimate noise complaint) shall be restricted to the 7:00 a.m. to 10:00 p.m. time period. • haul trucks shall be operated in accordance with posted speed limits. • truck engine exhaust brake use shall be 	Mitigated to less than significant

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		limited to emergencies.	
Noise - Operation	<p>PROJECT SPECIFIC: The AES site is currently zoned M2 (Industrial). The project site is adjacent to several industrial facilities. These facilities have standard industrial lighting and significant noise. Operation of the plant would produce some noise. Noise generated during the testing and commissioning phase of the project is not expected to be substantially different from that produced during normal full-load operation. Starts and abrupt stops are more frequent during this period, but on the whole they are usually short-lived. Predicted noise levels at each sensitive receptor is not anticipated to result in significant impacts, or as in the case of the nearby high school project, will not impact the interior noise thresholds established in the high school EIR or violate any standard adopted by either the city or local school district.</p> <p>CUMULATIVE: Not identified in document</p>	<p><i>To minimize noise from operation of the Highgrove Project, the following measures have been incorporated into the plant design:</i></p> <ul style="list-style-type: none"> • A berm and wall around the eastern and part of the northern portion of the site; • A barrier around the fuel gas compressors • Stack silencing • Combustion turbine enclosure 	Mitigated to less than significant
Population/Housing	Not evaluated in document	None identified in document	Not identified in document
Public Services	Not evaluated in document	None identified in document	Not identified in document
Recreation	Not evaluated in document	None identified in document	Not identified in document
Solid/Hazardous Waste – Construction	<p>PROJECT SPECIFIC: The handling and management of waste generated by the Highgrove Project will first take the effort to reduce the quantity of waste generated through pollution prevention methods (e.g., high-efficiency cleaning methods). The next level of waste management will involve the reuse or recycle of wastes (e.g., used oil recycling). For wastes that cannot be recycled, treatment will be used, if possible, to make the waste non-hazardous. Finally, offsite disposal will be used to dispose of residual wastes that cannot be reused, recycled, or treated. Nonhazardous solid waste generated during construction will be collected in onsite dumpsters and picked up periodically and taken to the local landfill. Recyclable materials can be segregated and transported by construction contractors or other private haulers to an area recycling facility.</p> <p>CUMULATIVE: The Highgrove Project facility will generate nonhazardous solid waste that will add to the total waste generated in San Bernardino County and in California. However, there is adequate recycling and landfill capacity in California to recycle and dispose of the waste</p>	To avoid the potential effects on human health and the environment from the handling and disposal of hazardous wastes, procedures will be developed to ensure proper labeling, storage, packaging, recordkeeping, and disposal of all hazardous wastes. Handling of hazardous wastes in this way will minimize the quantity of waste deposited to landfills.	Mitigated to less than significant

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	<p>generated by the Highgrove Project. It is estimated that the plant will generate approximately 534 tons of solid waste during construction, 569 tons during demolition and about 8,400 tons a year from operations (including approximately 2 tons of hazardous waste). Compared to the total amount of solid waste landfilled in San Bernardino County in the year 2004 of 1,791,864 tons, the Highgrove Project's contribution will represent less than 1 percent of total county waste disposal (CIWMB, 2006b). Therefore, the impact of the project on solid waste recycling and disposal capacity is not significant.</p>		
<p>Solid/Hazardous Waste - Operation</p>	<p>PROJECT SPECIFIC: Nonhazardous solid waste will be generated from plant operations, as well as varying quantities of liquid and solid hazardous waste. Hazardous waste generated will consist of waste oil, filters, SCR and oxidation catalysts, and fluids used to clean the piping. The waste oil and catalysts will be recycled. Cleaning and flushing fluids will be removed and disposed of offsite. Cleaning and flushing will occur only periodically. Hazardous waste treatment and disposal capacity in California is more than adequate. Therefore, the effect of the Highgrove Project on hazardous waste recycling, treatment, and disposal capability is not significant.</p> <p>CUMULATIVE: As noted in the cumulative impacts under construction, the impact of the project on solid waste recycling and disposal capacity from both construction and operation is not significant. Hazardous waste generated will consist of waste oil, filters, SCR and oxidation catalysts, and fluids used to clean the piping. The waste oil and catalysts will be recycled. Cleaning and flushing fluids will be removed and disposed of offsite. Cleaning and flushing will occur only periodically. Hazardous waste treatment and disposal capacity in California is more than adequate. Therefore, the effect of the Highgrove Project on hazardous waste recycling, treatment, and disposal capability is not significant.</p>	<p>To avoid the potential effects on human health and the environment from the handling and disposal of hazardous wastes, procedures will be developed to ensure proper labeling, storage, packaging, recordkeeping, and disposal of all hazardous wastes. Handling of hazardous wastes in this way will minimize the quantity of waste deposited to landfills.</p>	<p>Mitigated to less than significant</p>
<p>Traffic Impacts - Construction</p>	<p>PROJECT SPECIFIC: Project construction would result in short-term increases in vehicle trips by construction vehicular activities and construction workers. Because the volumes of traffic are low, this impact will be less than significant, with the possible exception of afternoon high school traffic. The horizontal alignment for the gas pipeline has been designed with traffic impacts in mind. Where possible, the line will be installed in locations where the traffic impacts of construction will be minimized.</p> <p>CUMULATIVE: The construction of the proposed Grand Terrace</p>	<p>To minimize construction-related impacts, the construction contractor will prepare a construction traffic control plan and construction management plan, also known as a Traffic Management Plan which will address timing of heavy equipment and building material deliveries, potential street and/or lane closures associated with pipeline</p>	<p>Mitigated to less than significant</p>

Environmental Topic	Impact(s)	Mitigation	Conclusion
	<p>Educational Facility (i.e., high school) will likely occur in the same approximate time frame as the proposed project. Cumulative transportation impacts may result from trips by construction workers for both projects on the same roadways at the same time. Construction of the proposed high school would generate various levels of truck and automobile traffic throughout the duration of the construction phase, which is expected to take approximately 28 months. The construction-related traffic includes construction workers traveling to and from the site as well as trucks hauling construction materials to the site and demolition/ excavation material away from the site. The construction activities would generate approximately 20 truck trips per day to deliver construction material and approximately 10 truck trips per day to remove demolition material from the site. The truck trips would be spread out throughout the workday and would generally occur during non-peak traffic periods. Even coupled with the truck trips for the proposed project, this level of construction-related traffic would not result in a significant cumulative traffic impact on the study area roadway network.</p>	<p>installation, signing, lighting, traffic control device placement, and establishing work hours outside of peak traffic periods.</p>	
<p>Traffic Impacts - Operation</p>	<p>PROJECT SPECIFIC: When completed, the operational phase of the proposed project would generate approximately 15 additional employees, or 30 daily trips. In addition, during operation the plant will average two truck trips per hour, which would result in a less-than-significant impact, as their traffic volumes would be immeasurable in terms of roadway capacity. CUMULATIVE: Cumulative impacts associated with the Outdoor Adventure Center (OAC) are much more significant during the operation of the OAC. The Specific Plan for the proposed OAC has an estimated daily traffic volume of 29,879 trips, including 1,454 during the morning peak hour and 2,154 during the evening peak hour. OAC daily traffic volumes are projected to be 3,800 vehicles/day on Iowa Avenue (south of Main Street), 7,800 vehicles/day on Taylor Street (between Iowa Avenue and Main Street) and 8,100 vehicles/day on Taylor Street (north of Main Street). Operations at Taylor Street/Main Street are not predicted to change significantly with the proposed OAC. However, operations at Iowa Avenue/Main Street are expected to degrade from LOS E to LOS F in the a.m. peak. In the p.m. peak, the intersection will remain at LOS F, but the additional traffic from the OAC will increase the delay substantially. However, improvements are proposed (as part of the OAC mitigation measures) at both intersections. Specifically, new traffic signals will improve operations. The new signals were only analyzed for 2030 (with other improvements), but both intersections are projected to operate at LOS</p>	<p>The operations- and maintenance-related traffic associated with the project is considered to be minimal. State routes and local roadways have adequate capacity to accommodate operations-related traffic. Consequently, no operations-related mitigation measures are required.</p>	<p>Less than significant</p>

Environmental Topic	Impact(s)	Mitigation	Conclusion
	<p>C or better. Since there are specific improvements at these intersections that will be constructed before the OAC opens, the relatively low traffic volumes associated with the proposed project (163 daily trips) will not be significant. Specifically, new traffic signals will improve operations, so that the construction trips associated with the proposed projects will result in cumulative impacts that are less than significant.</p>		