

**FINAL ENVIRONMENTAL IMPACT REPORT
GRAYSON REPOWERING PROJECT**

MITIGATION MONITORING AND REPORTING PLAN
March 1, 2018

10.0 MITIGATION MONITORING AND REPORTING PLAN

The following mitigation measures shall apply to the Grayson Repowering Project to reduce identified impacts to less than significant levels.

Mitigation Measure	Monitoring Action	Required Time of Compliance	Implementation Responsibility	Verification Responsibility	Verification Method	Compliance Date
AES-1	AES-1: Screen Laydown Areas: Staging and laydown areas within view of residences, motorists, and recreational facilities shall be located away from public views or effectively screened using opaque fencing to limit views of materials, equipment, vehicles, and other items used during construction. All laydown areas shall be effectively reclaimed immediately following completion of their use.	Duration of construction	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance and/or site inspection(s)	
HAZ-1	HAZ-1: Prior to demolition of facilities associated with the Grayson Repowering Project, hazardous materials stored onsite and not required for continued operation of the facility shall be inventoried, packaged, removed, and disposed in accordance with a Hazardous Materials Management Plan prepared by the demolition contractor and submitted to the City for review and approval prior to initiating demolition activities.	Prior to demolition	Demolition Contractor	City of Glendale	Review of Demolition Contractor's Hazardous Materials Management Plan and site inspection prior to initiating demolition	

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HAZ-2	<u>HAZ-2</u> : Buildings or equipment to be demolished containing lead based paint or asbestos shall be either decontaminated or encapsulated prior to removal from the Project site and disposed in accordance with an Asbestos and Lead Paint Management Plan prepared by the demolition contractor and submitted to the City for review and approval prior to initiating demolition activities.	Prior to demolition	Demolition Contractor	City of Glendale	Review of Demolition Contractor's Asbestos and Lead Paint Management Plan	
HAZ-3	<u>HAZ-3</u> : Contaminated soil encountered during demolition activities shall be handled, removed, and disposed in accordance with regulatory requirements and the Project's Soil Management Plan.	During demolition	Demolition Contractor	City of Glendale	Review of Project's Soil Management Plan and site inspection(s)	
HAZ-4	<u>HAZ-4</u> : Hazardous materials used during construction shall be limited to the quantities required for construction and shall be stored and handled in accordance with regulatory requirements.	Duration of construction	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Periodic site inspection	
HAZ-5	<u>HAZ-5</u> : Utility trucks and refueling trucks operating onsite shall have a spill kit onboard at all times. Small spills of petroleum products or other hazardous materials during construction operations shall be reported to the Construction Supervisor and a Spill Response form completed with a description of the type and	Duration of construction	Engineering, Procurement, and Construction Contractor (EPC) and Demolition Contractor	City of Glendale	Periodic site inspection	

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	quantity of the spill accompanied by photographs and a description of the disposition of the spill material. Hazardous spill material shall be disposed according to regulatory requirements. In the event of a large spill of hazardous materials equal to or above reportable quantities federal, state, and local reporting requirements shall be followed.					
HAZ-6	<u>HAZ-6:</u> The surface area of the proposed and existing ammonia tank containment systems shall be effectively reduced by 90 percent or greater through the installation and maintenance of three-inch diameter high density polyethylene balls or similar method.	Duration of construction	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance for the duration of construction. Site inspection for confirmation	
NOI-1	<u>NOI-1: Noise Source and Required Noise Control Measures: Cooling Towers:</u> The noise emissions from each cooling tower shall be limited to 57 dBA at 400 feet (107 dBA sound power level). Mats may be required to limit the water splash noise.	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance of noise controls	
NOI-2	<u>NOI-2: Noise Source and Required Noise Control Measures: Cooling Tower Fan Motors and Gearboxes:</u> The sound power levels for cooling tower motors shall be limited to 98 dBA (85 dBA at 3') the motors shall	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance of noise controls and placement	

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	be placed on the west side of the towers.					
NOI-3	<u>NOI-3: Noise Source and Required Noise Control Measures: Fuel Gas Compressors:</u> The noise emissions from each of the two fuel gas compressor areas shall be limited to 44 dBA at 400 feet. Compressor enclosures or properly designed noise barriers can be utilized. Under the current assessment scenario open air compressor equipment packages with total sound power level of 108 dBA were treated with 21-foot sound barrier to yield appropriate results.	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance of noise controls	
NOI-4	<u>NOI-4: Noise Source and Required Noise Control Measures: Water Treatment Area:</u> The noise emissions from the water treatment area shall be limited to 48 dBA at 400 feet. It is expected that this level can be achieved through a combination of equipment selection, small enclosures and barriers.	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance of noise controls	
NOI-5	<u>NOI-5: Noise Source and Required Noise Control Measures: Boiler Feed Water Pumps for Combined Cycle Units:</u> The sound power levels for boiler feed water pumps shall be limited to 105 dBA when placed outside near the respective HRSGs.	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance of noise controls	

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NOI-6	<u>NOI-6: Noise Source and Required Noise Control Measures: Circulating Water Pumps for Cooling Towers:</u> The sound power levels for circulating water pumps shall be limited to 101 dBA when placed outside near the respective cooling towers.	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance of noise controls	
NOI-7	<u>NOI-7: Noise Source and Required Noise Control Measures: Generator Step-up Transformers:</u> Standard NEMA 95 MVA rated transformers or lower shall be utilized.	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation demonstrating compliance of noise controls	
NOI-8	<u>NOI-8: Noise Source and Required Noise Control Measures: Steam Turbine Building:</u> The sound power level of the noise breaking out from the steam turbine building shall be limited to 95 dBA and 115 dBC (45 dBA and 65 dBC at 400 feet). Specialized enclosures for the gearboxes shall be required and steam turbine building walls and roofs shall have an STC 40 composite transmission loss rating.	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation compliance of noise controls	
NOI-9	<u>NOI-9: Noise Source and Required Noise Control Measures: Steam Pipe Rack:</u> The sound power level for the steam pipe rack shall be limited to 82 dBA per meter of piping.	During operation	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's written documentation compliance of noise controls	
NOI-10	<u>NOI-10: Noise Source and Required Noise Control Measures:</u>	During operation	Engineering, Procurement,	City of Glendale	Review of EPC's written	

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	<u>Steam Sky vents and safety valves:</u> Steam sky and safety valves shall be equipped with silencers to limit their noise emissions to 115 dBA sound power (approximately, 90 dBA at 5').		and Construction Contractor (EPC)		documentation compliance of noise controls	
TRA-1	<u>TRA-1:</u> To accommodate turning movements by large trucks (CA-Legal 65 feet) and public safety on Fairmont Avenue, the demolition and construction contractor shall be required to prepare a traffic control plan for City review and approval prior to initiating demolition and construction activities that includes the use of large trucks entering and departing the Grayson Power Plant from Fairmont Avenue.	Prior to initiating demolition and construction	Engineering, Procurement, and Construction Contractor (EPC) and Demolition Contractor	City of Glendale	Review of EPC and Demolition Contractor's traffic control plan prior to initiating demolition and construction	
TRA-2	<u>TRA-2:</u> To reduce construction traffic at the San Fernando Road and Doran Street intersection during the p.m. peak hours, a construction traffic control plan shall be developed by the contractor, reviewed and approved by the City, and implemented for the duration of the construction phase. The plan shall include measures to limit vehicle trips to a total of 24 trips or less during the hours of 4 to 6 p.m. for the San Fernando Road and Doran Street intersection.	Duration of the construction	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's construction traffic control plan and periodic site inspection	

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	Measures may include scheduling of construction activities or trip routing to minimized travel during peak p.m. traffic times, ride sharing, closing the parking lot, and/or other effective and verifiable measure.					
TRA-3	TRA-3: The applicant shall ensure that traffic control is implemented for the duration of demolition and construction phases. Traffic control shall include construction warning signs on Fairmont Avenue (Trucks Entering Exiting), and monitoring (flag person) on public roadways as needed during large transports.	Duration of demolition and construction	Engineering, Procurement, and Construction Contractor (EPC) and Demolition Contractor	City of Glendale	Review of EPC's written documentation compliance of traffic control plan and periodic site inspection	
TRA-4	TRA-4: A construction traffic control plan shall include provisions for days when high truck traffic is generated (soil delivery days, peak concrete delivery days). The plan will include considerations for truck staging to ensure that truck parking/staging can be accommodated off the City streets.	Duration of construction	Engineering, Procurement, and Construction Contractor (EPC)	City of Glendale	Review of EPC's traffic control plan	
TRA-5	TRA-5: Traffic control monitors shall direct traffic whenever heavy construction equipment is entering and exiting the plant as warranted to ensure public safety. The traffic monitor shall be posted throughout the demolition and construction periods, as necessary. The applicant shall coordinate	Duration of demolition and construction	Engineering, Procurement, and Construction Contractor (EPC) and Demolition Contractor	City of Glendale	Review of EPC's written documentation compliance of traffic control plan and written confirmation of coordination with	

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	with the Glendale Fire Department in order to ensure that traffic control routes and procedures would allow for adequate emergency access.				Glendale Fire Department	
TRA-6	<u>TRA-6:</u> All construction-related vehicles, equipment staging and storage areas shall be located in approved pre-determined areas that are outside of adjacent road right of ways. The applicant shall provide all construction personnel with a written notice of this requirement and a description of approved parking, staging and storage areas. The notice shall also include the name and phone number of the applicant's designee responsible for enforcement of this restriction.	Prior to construction	Engineering, Procurement, and Construction Contractor (EPC) and Demolition Contractor	City of Glendale	Review of EPC's written notice of parking requirement	
TRA-7	<u>TRA-7:</u> Construction traffic shall comply with the California Vehicle Code sections related to vehicle weight and width. Any extra-legal loads needed for specialized deliveries shall be subject to special permit requirements from the City of Glendale. Should roadway damage occur along the haul route that is directly attributable to the demolition and construction of the Project, repairs will be assessed by the City and completed accordingly.	Duration of construction	Engineering, Procurement, and Construction Contractor (EPC) and Demolition Contractor	City of Glendale	Review of EPC and Demolition Contractor's written documentation compliance of traffic control regulations	

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TRA-8	<p>TRA-8: Fugitive dust control shall be implemented according to SCAQMD Rule 402, 403 and 1186, and California Vehicle Code Section 23114, and Building & Safety requirements. Dust control mitigation measures include:</p> <ul style="list-style-type: none"> • Soil stabilizers and dust suppressants to control fugitive dust levels from exposed soils. • On-site water trucks to provide control of fugitive dust while soil is moved or disturbed. • Off-site vacuum and broom sweepers to remove any fugitive materials from the public roadways. • Track-out control to prevent dirt and mud from being spread to public roadways: <ul style="list-style-type: none"> ○ Sweeping or spray cleaning trucks prior to leaving project site. ○ Adequate truck load covering. ○ Limit on-site vehicle speeds to 15 mph. 	Duration of construction	Engineering, Procurement, and Construction Contractor (EPC) and Demolition Contractor	City of Glendale	Review of EPC and Demolition Contractor's written documentation compliance of SCAQMD Rules 402, 403 and 1186 and California Vehicle Code Section 23114, and Building & Safety requirements for fugitive dust. Periodic site inspection	
TRA-9	TRA-9: The temporary parking lot on Doran Street is served by two	Duration of construction	Engineering, Procurement,	City of Glendale	Review of EPC and Demolition	

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	driveways. To provide for sufficient spacing from the railroad tracks and sufficient queuing capacity, the driveway adjacent to the railroad tracks will be limited to entry only and the driveway located 400 feet west of the railroad tracks will be limited to exit only.		and Construction Contractor (EPC) and Demolition Contractor		Contractor's written documentation compliance of traffic control plan	