

Appendix B Mitigation Monitoring and Reporting Program

Public Resources Code, Section 21081.6 (Assembly Bill 3180) requires that mitigation measures identified in environmental review documents prepared in accordance with the California Environmental Quality Act (CEQA) are implemented after a project is approved. This Mitigation Monitoring and Reporting Program (MMRP) has been prepared to ensure compliance with the adopted mitigation measures during implementation of the Signal Hill Petroleum Conditional Use Permit 97-03 Extension Project (Project).

The City of Signal Hill (City) is the lead agency under CEQA and is responsible for verifying that mitigation measures identified in the Environmental Impact Report (EIR) are implemented properly. This MMRP provides the City with a mechanism for reviewing all the mitigation measures including the ability to focus on select information such as timing. The MMRP includes a checklist to be used during the mitigation monitoring period. The MMRP includes the following information for each mitigation measure:

- Description
- Time Frame for Implementation
- Steps to Compliance and Verification
- Responsible Monitoring Agency

Signal Hill Petroleum Conditional Use Permit 97-03 Extension Mitigation Monitoring Checklist

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
<p>Aesthetics</p>			
<p>Mitigation Measure AES-1: Nighttime Lighting</p> <p>If portable nighttime lighting is required during redrilling/drilling operations, nighttime lighting fixtures would be designed to confine illumination to the specific working areas on CUP drill sites and would avoid spillover into offsite areas with light-sensitive uses, including adjacent residential areas. Specifically, nighttime lighting fixtures would be fully shielded, directed downward, and installed and maintained in such a manner to avoid light trespass beyond the lot line in excess of those amounts set forth in Section 16.20.070 of the City's Oil and Gas Code (Signal Hill Municipal Code – Title 16). If required, nighttime lighting would be limited to portable lights or small lights affixed to equipment (e.g., vehicles, drill rigs, etc.) for safety purposes.</p>	<p>During drilling and redrilling activities, or construction activities if conducted during nighttime</p>	<p>SHP to maintain records of compliance (including photographs), to be made available to City inspectors upon request.</p>	<p>City of Signal Hill</p>
<p>Air Quality</p>			
<p>V AQ-1: Dust Control Measures</p> <p>The following measures would be implemented during construction activities to further reduce the amount of particulate matter entrained in the ambient air due to fugitive dust and would further reduce air quality impacts in a O₃ nonattainment area beyond the requirements of Rule 403. These measures would be adhered to during construction of the gas system modification at Drill Site #2, as well as construction of new well cellars at the other drill sites:</p> <ul style="list-style-type: none"> — Limit and remove the accumulation of mud and/or dirt from adjacent public roadways at the end of each workday (Use of dry rotary brushes is prohibited except when preceded or accompanied by sufficient wetting to limit visible dust emissions and use of blowers is expressly forbidden). — Cover or contain all soils removed from site during transport. — Stabilize the surface of storage piles following the addition or removal of materials using water or chemical stabilizer/suppressants. — Remove visible track-out from the site at the end of each workday. 	<p>During construction activities associated with the gas system modifications and new well cellars</p>	<p>Completion and submittal of Form 403N to South Coast AQMD</p> <p>Records to be made available to City inspectors upon request</p>	<p>City of Signal Hill</p> <p>South Coast AQMD</p>

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<ul style="list-style-type: none"> — Cease grading or other activities that cause excessive (greater than 20% opacity) dust formation during periods of high winds (greater than 20 mph over a one-hour period). — Maintain all construction equipment as recommended by manufacturer manuals. — Shut down equipment when not in use for extended periods. — Construction equipment shall operate no longer than eight (8) cumulative hours per day (with the exception of well drilling operations). — Use electric equipment for construction whenever possible in lieu of diesel or gasoline powered equipment, unless notice is provided in writing to the City with rationale for alternative equipment and approved by the City. — Stop use of high-emitting construction equipment during periods of high or excessive ambient pollutant concentrations. — All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NOx emissions. — On-Road and Off-Road diesel equipment shall use diesel particulate filters if permitted under manufacturer's guidelines. — On-Road and Off-Road diesel equipment shall use cooled exhaust gas recirculation (EGR) if permitted under manufacturer's guidelines. — All construction workers shall be encouraged to shuttle (car-pool) to retail establishments or to remain on-site during lunch breaks. — All construction activities within the project area shall be discontinued during the first stage smog alerts. — Construction and grading activities shall not be allowed during first stage O₃ alerts. First stage O₃ alerts are declared when the O₃ level exceeds 0.20 ppm (1-hour average). 			
<p>Biological Resources</p>			
<p>MM BIO-1: Pre-construction Bat Surveys. To ensure potential impacts to roosting bats are avoided, no existing structures/buildings or trees located on or near the existing CUP Sites shall be removed or demolished as a result of the Project. If structures/buildings or trees are removed within the vicinity of the CUP Sites, a pre-</p>	<p>Duration of CUPA coverage prior to construction</p>	<p>Submit report with results of surveys, and if necessary Project-specific bat</p>	<p>City of Signal Hill Planning Department</p>

Mitigation Measure	Time Frame for Implementation	Steps to Compliance and Verification	Responsible Monitoring Agency
<p>construction bat survey shall be conducted by a qualified bat biologist to evaluate structures proposed for demolition, or tree removal that could potentially provide bat roosting habitat as result of the Project. If suitable roosting habitat and/or signs of bat use is identified during the assessment, focused surveys shall be conducted and appropriate avoidance and minimization measures implemented. Such measures may include any of the following as necessary and appropriate to the findings of the focused surveys: spatial and temporal avoidance measures, no-disturbance buffers, passive exclusion of bats outside of the maternity season (if necessary).</p>		<p>management plan for review.</p>	
<p>MM BIO-2: Pre-construction Nesting Bird Surveys.</p> <p>New construction activities associated with the proposed Project include installation of the new gas system components at Drill Site #2, as well as construction of new well cellars at the drill Sites. Therefore, construction of the gas system improvements and new well cellar construction shall be conducted during the non-breeding season for birds (approximately September 1 through January 31) to avoid violations of the MBTA and California Fish and Game Code §§ 3503, 3503.5 and 3513. If activities with the potential to disrupt nesting birds are scheduled to occur during the bird breeding season (February 1 through August 31), a pre-construction nesting bird survey shall be conducted by a qualified biologist who is experienced in the identification of avian species and conducting nesting bird surveys no more than 3 days prior to the start of the construction, vegetation management, or tree removal activities. The nesting bird survey shall include the areas where the activities will occur and adjacent areas where the activities have the potential to cause indirect impacts to nesting birds. If nesting birds are not observed during the survey, construction activities, vegetation management, or tree removal may begin. If nesting birds (including nesting raptors) are observed during the survey, avoidance or minimization measures shall be implemented by the Project biologist to avoid potential Project-related impacts to active nests. Measures may include but not be limited to biological monitoring during the activities, seasonal work restrictions, or establishment of a no-work buffer around active nests until nesting has been completed as determined through periodic nest monitoring conducted by the biologist. The size of the no-work buffer shall be determined by the Project biologist (depending on the species) until the juveniles have fledged and there has been no evidence of a second attempt at nesting, as determined by the Project biologist.</p>	<p>Duration of CUP coverage, prior to construction, if conducted during nesting bird season: February 1 through August 31</p>	<p>Submit nesting bird survey reports for review. Reports shall identify results of any surveys and if necessary, measures for protection of nests and recommended buffer areas.</p>	<p>City of Signal Hill Planning Department</p>
<p>Cultural Resources</p>			

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<p>MM CUL-1: Qualified Archaeologist</p> <p>In the event that any archaeological features are discovered during construction, all work shall stop, and a qualified archaeologist shall be notified. The archaeologist shall record the site and work with the City to identify an alternate location within the boundaries of the drill sites that will avoid impacting cultural resources. The archaeologist shall prepare a report according to current professional standards.</p>	<p>During construction activities that require excavation-new well cellars and the foundations for the gas plant modifications</p>	<p>Submit archaeologist report for review. Submit proposed site plan for alternative work location within CUP site to the City for review and approval.</p>	<p>City of Signal Hill Planning Department</p>
<p>Geology and Soils</p>			
<p>MM GEO-1: Worker Environmental Awareness Program</p> <p>All contractors and earth moving personnel shall be given Worker Environmental Awareness Program training by a qualified paleontological resource specialist prior to any ground-disturbing activities to discuss the activity's potential for impacting paleontological resources. The training shall inform personnel of the types of artifacts and features that may be encountered, the procedures to be followed if paleontological materials are unearthed at a Project site, contact information for appropriate reporting parties, and the regulatory requirements for the protection of paleontological resources. If unrecorded paleontological resources are encountered during Project-related ground-disturbing activities, a qualified paleontological resources specialist shall be contacted to assess the potential significance of the find. If an inadvertent discovery of paleontological materials is made during Program-related activities, ground disturbances in the area of the find will be halted, and a qualified professional paleontologist will be notified regarding the discovery. The paleontologist shall determine whether the resource is potentially unique and, if so, develop appropriate mitigation, such as avoidance or data recovery.</p>	<p>Prior to ground-disturbing activities</p>	<p>Submit Worker Environmental Awareness Program Document to the City for review and approval. Submit records of attendance indicating date of training, location of training, and name of trainer, with name and signature of all attendees to the City.</p>	<p>City of Signal Hill Planning Department</p>
<p>Noise</p>			
<p>MM NOISE-1: Onsite Noise Measurements-Gas System Modification</p> <p>Following installation of the gas system modification system at Drill Site #2, equipment noise levels shall be verified through onsite noise measurements along the western property boundary. In the event that actual measured noise levels exceed 70 dBA when measured at this location, or exceed the ambient noise levels measured in April 2022 (see Table 3.13-2 above) by more than 3 dBA, additional noise control measures shall be implemented until the measured noise levels no longer exceed the applicable standards.</p>	<p>Following installation of the gas modification system at Drill Site #2</p>	<p>Submit noise monitoring report confirming that operations comply with required noise level limits to the City for review. City to conduct independent field verification.</p>	<p>City of Signal Hill Planning Department</p>

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<p>MM NOISE-2: Drilling Noise Control Measures</p> <p>To ensure that drill rig noise levels at Drill Sites #5, #6 and #7 do not exceed the applicable standards published by the City of Signal Hill or the City of Long Beach, SHP shall implement one of the following control measures:</p> <ul style="list-style-type: none"> – Prohibit drilling/redrilling within the following areas at Drill Sites #5, #6 and #7: – 210-feet of the residences (i.e., Receptor 16) located north of Drill Site #5 across Combella Drive. – 270-feet of the residential neighborhoods (i.e., Receptors R20 and R21) located north of Drill Site #6, across 20th Street. – 150-feet of the commercial building (i.e., Receptor R22) located immediately east of Drill Site #7. <p>If onsite drilling/redrilling operations occur within the above-listed areas at Drill Sites #5, #6 and #7 noted above, SHP shall implement one or more of the following additional measures:</p> <ul style="list-style-type: none"> – Curtail drill rig operations during the evening and nighttime hours (i.e., 7:00 p.m. to 7:00 a.m.). – Install additional temporary sound barriers (e.g., curtains, shoots, etc.) affixed to the noisiest components of the drill rig, when occurring within the setback areas noted above. Temporary barriers should have a minimum Sound Transmission Class (STC) rating of 25 (STC-25), and should be of sufficient length/height to block line-of-sight between the equipment source (e.g., engines, generators, etc.) and the affected receptor. If needed, temporary barriers may be installed in multiple layers to ensure noise is sufficiently attenuated. – Construct new permanent barriers (e.g., concrete block walls, concrete paneling, etc.) along the drill site perimeters adjacent to the affected receptor(s). Perimeter walls should be installed prior to commencing evening and nighttime drilling/redrilling operations, and should be constructed of sufficient length/height to block line-of-sight between the drill rig and the receptor. 	<p>Prior to drilling new wells/redrilling existing wells at Drill Site #5, #6, or #7</p>	<p>Submit noise monitoring report confirming that operations comply with required noise level limits to the City for review. City to conduct independent field verification.</p>	<p>City of Signal Hill Planning Department</p>
<p>MM NOISE 3: Onsite Noise Measurements-Drilling Operations</p> <p>Following implementation of MM NOISE-2 during drill rig operations at Drill Sites #5, #6 and #7, the effectiveness of the control measures shall be verified through onsite noise measurements upon commencement of drilling operations. In the event that actual measured noise levels</p>	<p>During drilling operations at Drill Sites #5, #6, and #7</p>	<p>Submit noise monitoring report confirming that operations comply with required noise level limits to</p>	<p>City of Signal Hill Planning Department</p>

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<p>exceed the applicable numeric standards and/or conflict with the assumptions contained within this analysis, additional noise control measures shall be implemented until the measured noise levels no longer exceed the applicable standards published by the City of Signal Hill or the City of Long Beach.</p>		<p>the City for review. City to conduct independent field verification.</p>	
<p>Transportation</p>			
<p>MM TRA-1: Peak Hour Delivery Avoidance</p> <p>During temporary construction activities, specifically construction of the gas system modifications at Drill Site #2 and/or well cellar construction, larger equipment and construction material deliveries shall be avoided during peak hours. Specifically, heavy-duty trucks shall abstain from travelling to and from the CUP sites between the hours of 7:00 a.m. and 9:00 a.m., and 4:30 p.m. and 6:30 p.m., Monday through Friday.</p>	<p>During construction activities</p>	<p>SHP to maintain records of truck entry and exit times at each drill site during temporary construction activities and provide to the City upon request.</p>	<p>City of Signal Hill Planning Department</p>
<p>Tribal Cultural Resources</p>			
<p>MM TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities</p> <p>SHP shall retain a Native American monitor from (or approved by) the Gabrieleño Band of Mission Indians – Kizh Nation (the “Kizh” or the “Tribe”) – the direct lineal descendants of the project location, prior to the commencement of any “ground-disturbing activity” for the subject project, at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” includes, but is not limited to, pavement removal, potholing, auguring, grubbing, tree removal, grading, excavation, and trenching. A copy of the executed monitoring agreement shall be provided to the City of Signal Hill prior to the earlier of the commencement of any ground-disturbing activity for the Project, or the issuance of any permit necessary to commence a ground-disturbing activity.</p> <p>SHP shall provide the Tribe with a minimum of 30 days advance written notice of the commencement of any project ground-disturbing activity so that the Tribe has sufficient time to secure and schedule a monitor for the Project. SHP shall hold at least one pre-construction sensitivity/educational meeting prior to the commencement of any ground-disturbing activities, where at a senior member of the Tribe will inform and educate the Project’s construction and managerial crew and staff members (including any project subcontractors and consultants) about the TCR mitigation measures and compliance obligations, as well as places of significance</p>	<p>Prior to ground disturbance from construction activities that require excavation (e.g., new well cellar, constructions, foundations for the gas plant modifications, etc.)</p>	<p>Submit copy of executed tribal monitoring agreement to City for review and approval. Submit proof of pre-construction meeting and attendance log to City.</p>	<p>City of Signal Hill Planning Department</p>

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<p>located on the project site (if any), the appearance of potential TCRs, and other informational and operational guidance to aid in the project’s compliance with the TCR mitigation measures.</p> <p>The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or “TCR”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request.</p> <p>Native American monitoring for the Project shall conclude upon the latter of the following: (1) written confirmation from a designated project point of contact to the Tribe that all ground-disturbing activities and all phases that may involve ground-disturbing activities on the Project site and at any off-site Project location are complete; or (2) written notice by the Tribe to the SHP and/or City of Signal Hill that no future, planned construction activity and/or development/construction phase (known by the Tribe at that time) at the Project site and at any off-site Project location possesses the potential to impact TCRs.</p>			
<p>MM TCRCR-2: Discovery of TCRs, Human Remains, and/or Grave Goods</p> <p>Upon the discovery of a TCR, all construction activities in the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) shall cease. The Tribe shall be immediately informed of the discovery, and a Kizh monitor and/or Kizh archaeologist will promptly report to the location of the discovery to evaluate the TCR and advise the project manager regarding the matter, protocol, and any mitigating requirements. No Project construction activities shall resume in the surrounding 50 feet of the discovered TCR unless and until the Tribe has completed its assessment/evaluation/recovery of the discovered TCR and surveyed the surrounding area. The Tribe will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate in its sole discretion, and for any purpose the Tribe deems appropriate, including but not limited to, educational, cultural and/or historic purposes.</p> <p>If Native American human remains and/or grave goods are discovered or recognized on the Project site or at any off-site project location, then all construction activities shall immediately cease. Native American “human remains” are defined to include “an inhumation or cremation, and in any state of decomposition or skeletal completeness.” (Pub. Res. Code § 5097.98 (d)(1).) Funerary objects, referred to as “associated grave goods,” shall be treated in the same manner</p>	<p>During ground disturbing activities, if applicable</p>	<p>Maintain records of discovered TCR and communication with tribal monitor.</p>	<p>City of Signal Hill Planning Department</p>

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<p>and with the same dignity and respect as human remains. (Pub. Res. Code § 5097.98 (a), d)(1) and (2).)</p> <p>Any discoveries of human skeletal material or human remains shall be immediately reported to the County Coroner (Health & Safety Code § 7050.5(c); 14 Cal. Code Regs. §15064.5(e)(1)(B)), and all ground-disturbing project ground-disturbing activities on site and in any other area where the presence of human remains and/or grave goods are suspected to be present, shall immediately halt and remain halted until the coroner has determined the nature of the remains. (14 Cal. Code Regs. § 15064.5(e).) If the coroner recognizes the human remains to be those of a Native American or has reason to believe they are Native American, he or she shall contact, within 24 hours, the Native American Heritage Commission, and Public Resources Code Section 5097.98 shall be followed. Thereafter, construction activities may resume in other parts of the Project site at a minimum of 200 feet away from discovered human remains and/or grave goods, if the Tribe determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination (along with any other mitigation measures the Tribal monitor and/or archaeologist deems necessary). (14 Cal. Code Regs. § 15064.5(f).) Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or grave goods.</p> <p>Any historic archaeological material that is not Native American in origin (non-TCRs) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes. Any discovery of human remains and/or grave goods discovered and/or recovered shall be kept confidential to prevent further disturbance.</p>			
<p>MM TCR-3: Procedures for Burials, Funerary Remains, and Grave Goods</p> <p>As the Most Likely Descendant (“MLD”), the Koo-nas-gna Burial Policy shall be implemented for all discovered Native American human remains and/or grave goods. Tribal Traditions include, but are not limited to, the preparation of the soil for burial, the burial of funerary objects and/or the deceased, and the ceremonial burning of human remains. If the discovery of human remains includes four (4) or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated “grave goods” (aka, burial goods or funerary objects) are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at</p>	<p>During ground disturbing activities, if applicable</p>	<p>Maintain records of communication with tribal monitor</p>	<p>City of Signal Hill Planning Department</p>

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<p>the time of death or later, as well as other items made exclusively for burial purposes or to contain human remains. Cremations will either be removed in bulk or by means necessary to ensure complete recovery of all sacred materials.</p> <p>In the case where discovered human remains cannot be fully recovered (and documented) on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to divert the Project while keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. The site of reburial/repatriation shall be agreed upon by the Tribe and the landowner, and shall be protected in perpetuity.</p> <p>Each occurrence of human remains and associated grave goods will be stored using opaque cloth bags. All human remains, grave goods, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items will be retained and shall be reburied within six months of recovery. The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Tribe. If any data recovery is performed, once complete, a final report shall be submitted to the Tribe and the NAHC. The Tribe does not authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains. SHP shall prepare and implement an Unanticipated Discoveries Plan.</p>			