

8.0 Summary of Mitigation Measures and Mitigation Monitoring Plan

8.1 Mitigation Monitoring Program

As the Lead Agency under the California Environmental Quality Act (CEQA), the City of Hermosa Beach (City) is required to adopt a program for reporting or monitoring regarding the implementation of mitigation measures for this Project, if it is approved, to ensure that the adopted mitigation measures are implemented as defined in this Environmental Impact Report (EIR). This Lead Agency responsibility originates in Public Resources Code Section 21081.6(a) (Findings) and the CEQA Guidelines Sections 15091(d) (Findings) and 15097 (Mitigation Monitoring or Reporting).

8.2 Monitoring Authority and Enforcement Responsibility

The purpose of a Mitigation Monitoring, Compliance, and Reporting Program (MMCRP) is to ensure that measures adopted to mitigate or avoid significant impacts are implemented. A MMCRP can be a working guide to facilitate not only the implementation of mitigation measures by the Project proponent, but also the monitoring, compliance, and reporting activities of the City and any monitors it may designate.

The City may delegate duties and responsibilities for monitoring to other environmental monitors or consultants as deemed necessary, and some monitoring responsibilities may be assumed by responsible agencies, such as affected jurisdictions and cities. The number of monitors assigned to the Project will depend on the number of concurrent activities and their locations. The City or its designee(s), however, will ensure that each person delegated any duties or responsibilities is qualified to monitor compliance.

Any mitigation measure study or plan that requires the approval of the City must allow at least 60 days for adequate review time. When a mitigation measure requires that a mitigation program be developed during the design phase of the Project, the Applicant must submit the final program to City for review and approval for at least 60 days before any activity begins. Other agencies and jurisdictions may require additional review time. It is the responsibility of the environmental monitor assigned to the Project to ensure that appropriate agency reviews and approvals are obtained.

The City or its designee will also ensure that any deviation from the procedures identified under the monitoring program is approved by the City. Any deviation and its correction shall be reported immediately to the City or its designee by the environmental monitor assigned to the Project.

The City is responsible for enforcing the procedures adopted for monitoring through the environmental monitor assigned to the Project. Any assigned environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the City or its designee.

8.3 Mitigation Compliance Responsibility

The Applicant is responsible for successfully implementing all the mitigation measures in the MMCRP, and is responsible for assuring that these requirements are met by all of its contractors and field personnel. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Other mitigation measures include detailed success criteria. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

8.4 General Monitoring Procedures

Environmental Monitors. The City and the environmental monitor(s) are responsible for integrating the mitigation monitoring procedures into the construction or operation process in coordination with the Applicant. To oversee the monitoring procedures and to ensure success, the environmental monitor assigned to the Project must be on site during that portion of the construction or operation that has the potential to create a significant environmental impact or other impact for which mitigation is required. The environmental monitor is responsible for ensuring that all procedures specified in the monitoring program are followed.

Construction and Operations Personnel. A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction and operations personnel and supervisors. Many of the mitigation measures require action on the part of the supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures, will be taken:

- Procedures to be followed by construction or operations companies hired to do the work will be written into contracts between the Applicant and any contractors. Procedures to be followed by construction and operations crews will be written into a separate document that all personnel will be asked to sign, denoting agreement.
- One or more meetings will be held to inform all and train personnel about the requirements of the monitoring program.
- A written summary of mitigation monitoring procedures will be provided to supervisors for all mitigation measures requiring their attention.

General Reporting Procedures. Site visits and specified monitoring procedures performed by other individuals will be reported to the environmental monitor. A monitoring record form will be submitted to the environmental monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the environmental monitor. A checklist will be developed and maintained by the environmental monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The environmental monitor will note any problems that may occur and take appropriate action to rectify the problems.

Public Access to Records. The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the City or its designee on request.

8.5 Mitigation Monitoring Table

Tables 8.1 through 8.11 present a summary of monitoring and reporting plan requirements for the mitigation measures identified in Chapter 4 of the EIR as applicable to the Proposed Project. The Table provides the following information, by column:

- Mitigation Measure (description of the mitigation measure identified in Chapter 4);
- Monitoring/Plan Requirements (monitoring or plan requirements necessary to verify compliance with the mitigation measure);
- Method of Verification (this is how the responsible agency can determine if the mitigation measure has been implemented);
- Timing (this identifies when action needs to be taken on mitigation measure); and
- Responsible Agency (this is the agency that is responsible for assuring compliance with the mitigation measure).

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Table 8-1 Aesthetics and Visual Resources

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
EM-1	<p>Prior to issuance of the first grading and/or construction permits, the Applicant shall enter into agreements with the City to provide funding for the implementation and administration of an environmental monitoring program, including an environmental monitor, to ensure compliance with each Agency's environmental Conditions of Approval. The monitor shall assist the Agencies in condition compliance and mitigation monitoring for all applicable construction and operational stages of the Oil Project, as specified in a scope of work, as approved by the Agencies.</p> <p>The monitoring program shall include a post-construction program to monitor measures that extend beyond the construction period (e.g., success of landscaping, etc.), as well as monitor certain mitigation measures required during the operational phase.</p> <p>The monitor will prepare a working monitoring plan that reflects the Agencies -approved environmental mitigation measures/conditions of approval. This plan will include:</p> <ol style="list-style-type: none"> 1. Goals, responsibilities, authorities, and procedures for verifying compliance with environmental mitigations; 2. Lines of communication and reporting methods; 3. Daily and weekly reporting of compliance; 4. Construction crew training regarding environmental sensitivities; 5. Authority to stop work; and 6. Action to be taken in the event of non-compliance. <p>The environmental monitor shall be under contract to the Agencies. Costs of the monitor, monitoring program, and any Agency administrative fees, shall be paid by the Applicant.</p> <p>The Applicant shall also be responsible for funding work required by permit conditions requiring use of individuals with special expertise (e.g., geologist, noise engineer, etc.). The Agencies' environmental monitor will coordinate the monitoring efforts of the specialist, including communication with the Agencies, reporting and availability (at appropriate times: prior to issuance of construction permits, or during construction, as required by applicable permit conditions).</p>	Conditions included within the Development Agreement, including administrative measures to ensure bonding, payment methods and insurance	Before the start of Phase 1	City of Hermosa Beach
AE-1a	Material choice of electrical drill rig acoustical shroud shall be of neutral sky	Approval of	Prior to	City of

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	color which is selected for its ability to reduce visual impact, in coordination with and approval by the City Community Development Director.	Construction Documents and Specifications and field-demonstration	issuance of permits	Hermosa Beach
AE-1b	The sound attenuation wall shall be replaced by a permanent wall with design features installed at the end of Phase 3. The intent is to provide stability of views and opportunities for positive visual elements that partially mitigate the visual presence of the walls from the Hermosa Greenbelt and other sensitive views in the immediate Project vicinity. The permanent wall shall be allowed to be provided in lieu of the 16-foot block wall. Landscape design shall be allowed to be adjusted to respond to façade articulations, though quantities and densities shall be maintained. The permanent wall shall be designed with architectural features in coordination with and approval of the City Community Development Director.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-2a	Design of the sound attenuation wall exterior façade shall be required to include design articulations that are complementary to the character, scale, and quality of the surrounding environment. The intent is to mitigate the visual impact of the wall from the Hermosa Greenbelt and other sensitive views in the immediate project vicinity. The following measures of success shall be met: 1) Articulations of façade decrease scale and proportion of mass into smaller increments that more closely resemble those of adjacent buildings; and 2) Colors, detailing and material use are varied to a level consistent with existing visual environment.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-2b	Planting area growth medium shall be capable of supporting the long term health and growth of the landscape design. Requirements shall be: 1) Demonstrated free of debris and construction waste (asphalt, concrete, etc) to a minimum depth of 3 feet within all planted areas. Wall footings shall be designed to limit encroachment into planted areas; 2) Soils analysis report shall be conducted by a certified soil scientist. Report shall include recommendations to meet the intent of this mitigation measure; and 3) If soils are determined to be unsuitable to support plant growth, they shall be amended or removed/replaced to meet requirements of soils analysis for plant palette selected.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

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Mitigation Measure	Requirements	Compliance Verification		
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AE-2c	Vine plantings where used shall meet the following conditions: 1) be self-attaching or structure supported; 2) have demonstrated success in the City; 3) be planted at a density to achieve full coverage at maturity; 4) be planted at a minimum 5 gallon size; and 5) be required on the visible portion of the west wall at the temporary parking facility.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-2d	All trees shall be required to be a minimum of 20' in height at installation and meet the American Standard for Nursery Stock (ANSI Z60.1-2004). If a tree species alternate is proposed, it shall be required to be an equal to the species proposed in the Project Application in the following characteristics: 1) Dense evergreen with similar form and habit; 2) Probability of achieving a minimum of 35-40 feet at maturity; and 3) Comply with Municipal Code Chapter 8.60 and 8.56.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-3a	Pipeline alignments and valve box locations shall be designed to avoid the removal or modification of trees, hedgerows, and/or large shrubs to the extent feasible.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	Cities of Hermosa Beach, Redondo Beach, and Torrance
AE-3b	If landscaped areas, streetscapes, plazas and/or parklands are required to be temporarily disturbed, they shall be restored to their previous condition following completion of construction. Avoidance of disturbance shall be the preferred option, especially where landscape elements act to screen views (hedges, large shrubs, etc) or where they act as community gateways (Redondo Beach at Hwy-1).	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	Cities of Hermosa Beach, Redondo Beach and Torrance
AE-3c	Block color/s selection and pattern (if applicable) shall be complementary to adjacent buildings. A buffer of shrubs and vines shall be planted to match the existing character and quality of the adjacent properties.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	Cities of Hermosa Beach, Redondo Beach and Torrance
AE-4a	Final acoustical cover material selection shall be required to be fully opaque. Fully opaque shall be defined as completely blocking all light from passing through its surface. The exterior finish shall be low reflectivity and not capable of producing glare.	Approval of Construction Documents and Specifications	Prior to issuance of permits and during	City of Hermosa Beach

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Mitigation Measure	Requirements	Compliance Verification		
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		and Inspection	construction	
AE-4b	Colors and finishes of equipment and surfaces within the soundwall (including the interior face of the soundwall, the interior face of the drill rig acoustical cover, and the physical structure of the drill rig within the acoustical shield) shall have a reflectivity rating of 0.3 or lower.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-4c	All proposed site lighting fixtures associated with the drilling activities shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the 7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-5a	Colors and finishes of surfaces within the facility, including the interior face of the soundwall, ground materials (darker or asphalt), wall paints and equipment paints to the extent feasible shall have a low reflectivity rating of 0.3 or lower to reduce the potential for glow.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-5b	Final sound wall material/s selection/s (including gates) shall be fully opaque. Fully opaque shall be defined as completely blocking all light from passing through its surface. The exterior finish shall be low reflectivity and not capable of producing glare.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-5c	All proposed site lighting, including fixtures outside the wall, shall be fully shielded. Fully shielded shall be defined as: A luminaire constructed and installed in such a manner that all light emitted by the luminaire, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the luminaire, is projected below the horizontal plane through the luminaire's lowest light-emitting part (IES/IDA, 2011)	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-5d	The LZ-2 parameters of the Model Lighting Ordinance (IES/IDA, 2011) shall be used to demonstrate that maximum vertical illuminance for the site are not exceeded. For site lighting inside the wall, Table B allowances shall be used. Lighting outside the wall at site entrances shall not exceed that of existing street lighting, which produces a maximum of 1 footcandle. For the purposes of measuring vertical illumination, the plane of the property line shall be	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

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	extended to an elevation equal to the height of the electric drilling rig.			
AE-5e	All proposed site lighting fixtures shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the 7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-6a	Any proposed metering station site lighting shall be fully shielded and shall incorporate permanent features (shields, hoods, etc.) shall incorporate permanent features which prevent light spillage beyond the property line.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Redondo Beach
AE-6b	Light levels and quantities of fixtures shall not exceed that which is needed for security and safety.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	Cities of Redondo Beach and Torrance

Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AE-7a	The materials, colors and finishes at the Proposed City Maintenance Yard Project shall be of comparable quality, character and level of architectural detail to those of adjacent structures.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-7b	The landscape design at the Proposed City Maintenance Yard Project shall be of comparable quality and character to that of the surrounding visual environment. Incorporation of evergreen trees, shrubs, groundcovers and vines are recommended for their ability to provide additional screening capacity of operations areas.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

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Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AE-7c	The operations yard area of the proposed City Maintenance Yard Project shall be required to have a 6-foot minimum screen wall around its perimeter (where building masses do not otherwise define the perimeter). Additional vertical screening at Asset Disposal and Washdown/Dump areas shall be employed through either increased screen wall height and/or landscape design.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-8a	All proposed site lighting shall be fully shielded and shall incorporate permanent features which prevent light spillage beyond the property line.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-8b	Light levels and quantities of fixtures at the Proposed City Maintenance Yard Project shall not exceed that which is needed for security.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach
AE-8c	All proposed site lighting fixtures shall demonstrate compliance with the mandatory B-U-G ratings for area lighting as required by CalGreen mandatory measures in the 7/1/2012 supplement. The Lighting Zone used to demonstrate compliance shall be LZ-2.	Approval of Construction Documents and Specifications and Inspection	Prior to issuance of permits and during construction	City of Hermosa Beach

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Table 8-2 Air Quality and GHG's

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AQ-1a	<p>The Applicant shall submit and implement a Fugitive Dust Control Plan that includes SCAQMD mitigations for fugitive dust mitigation, according to Rule 403, and SCAQMD CEQA Guidelines. Fugitive dust mitigation measures in the plan shall include the following (this mitigation is applicable to both the Proposed Oil Project and the Proposed City Maintenance Yard Project):</p> <ul style="list-style-type: none"> - Apply water every 3 hours to disturbed areas and unpaved roads within a construction site (61 percent reduction). - Require minimum soil moisture of 12 percent for earthmoving, by using a moveable sprinkler system or water truck. Moisture content can be verified by lab sample or moisture probe (69 percent reduction). - Limit onsite vehicle speeds on unpaved roads to 15 mph and posting of speed limits. - All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches (91 percent reduction). - Install gravel bed trackout apron (3 inches deep, 25 feet long, 12 feet wide per lane, and edged by rock berm or row of stakes) to reduce mud and dirt trackout from unpaved truck exit routes (46 to 80 percent reduction). - Water storage piles by hand or apply cover when wind events are declared, according to SCAQMD Rule 403 when instantaneous wind speeds exceed 25 miles per hour (90 percent reduction). - Appoint a construction relations officer to act as a community liaison concerning onsite construction issues, such as dust generation. 	Plan review, site inspections	Before and during construction Both Oil Project and City Yard	SCAQMD City of Hermosa Beach
AQ-1b	<p>The Applicant shall implement a NOx reduction program including the following, or equivalent, measures to the satisfaction of the SCAQMD (this mitigation is applicable to both the Proposed Oil Project and the Proposed City Maintenance Yard Project):</p> <ul style="list-style-type: none"> - All off-road construction equipment shall be tuned and maintained according to manufacturers' specifications. - Any temporary electric power shall be obtained from the electrical grid, rather than portable diesel or gasoline generators. - All off-road diesel construction equipment with greater than 100- 	Plan review, site inspections	Before and during construction	SCAQMD City of Hermosa Beach

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	horsepower engines shall meet Tier 3 NOx requirements. - Limit onsite truck idling to less than 5 minutes. - A copy of the certified tier specification, best available control technology documentation, or the CARB or SCAQMD operating permit for each piece of equipment shall be kept onsite during all operations.			
AQ-3a	The Applicant shall limit flaring during Phase 4 to a total of 5 hours per day at the full flaring capacity (or to an equivalent volume of flared gas) during all emergency or routine flaring events in order to ensure that NOx emissions are reduced below the thresholds. Lower NOx emission combustors or other equivalent measures can also be used to satisfy the requirement.	Plan review, site inspections	Before Phase 4 operations	SCAQMD City of Hermosa Beach
AQ-3b	The Applicant shall implement methods to reduce the off-gassing of muds by at least 90 percent through the installation of fully enclosed mud pit areas with vapor control (either through carbon canisters or vapor recovery) and/or the use of mud degassing units routed to vapor control systems. The Applicant shall monitor the muds vapor immediately above the muds exit point from the wellbore and at other areas above the mud pits where muds may be exposed to the atmosphere in order to ensure that hydrocarbon vapors are captured at the minimum rate of 90 percent.	Plan review, site inspections	Before Phase 2 drilling	SCAQMD City of Hermosa Beach
AQ-4	The Applicant shall limit the microturbine PM emissions to 0.0035 lbs/mmmbtu, or an equivalent reduction in the number and/or size of the microturbines, in order to reduce emissions to below the localized thresholds. The City shall be responsible for ensuring that the applicant will be subject to permit conditions that limit emissions from the set of microturbines, not just individual permit units.	Plan review, site inspections	Before Phase 4 operations	SCAQMD City of Hermosa Beach
AQ-5a	The Applicant shall at all times have a gas buster and SCAQMD-approved portable flare at the site and connected for immediate use to circulate out and combust any gas encountered during drilling. The flare shall be capable of recording the volume of gas that is flared. The operator shall report any flared gas from drilling to the Hermosa Beach Fire Chief and the SCAQMD.	Plan review, site inspections	Before Phase 2 drilling	SCAQMD City of Hermosa Beach
AQ-5b	The Applicant shall install a compressor seal vent collection system. In the event of a seal leak, vapors shall be collected and sent to the vapor recovery system or flare for destruction.	Plan review, site inspections	Before Phase 4 operations	SCAQMD City of Hermosa Beach
AQ-5c	The Applicant shall develop and implement an Odor Minimization Plan, submitted to and approved by the City and the SCAQMD. The Odor	Plan review, site inspections	Before Phase 2 operations	SCAQMD City of

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	Minimization Plan shall address reducing the frequency from potential sources of odors from all site equipment, including wells and drilling operations, temporary operations such as truck loading, and measures to reduce or eliminate these odors (e.g., containment, design modifications, carbon canisters). The Plan shall address issues such as facility information, buffer zones, signs with contact information, logs of odor complaints, the protocol for handling odor complaints and odor release investigations and methods instituted to prevent a re-occurrence. The Plan shall require that all odor complaints and issues be immediately communicated to the City and that the City shall have the authority to implement and enforce contingency measures to ensure that any nuisance odors from the facility are eliminated.			Hermosa Beach
AQ-5d	The Applicant shall develop and implement an Air Monitoring Plan. The Plan shall provide for the monitoring of total hydrocarbon vapors and hydrogen sulfide and total hydrocarbon vapors at all perimeter locations of the facility as well as at strategic locations near processing equipment. At all times during operations, drilling, re-drilling and workover operations, the Operator shall maintain monitoring equipment that shall monitor and digitally record the levels of hydrogen sulfide and total hydrocarbon vapors. Such monitors shall provide automatic alarms that are audible and visible to the Operator of the drilling equipment, and gas plant, and shall be triggered by the detection of hydrogen sulfide or total hydrocarbon vapors. Alarm points shall be set at a maximum of 1 and 5 ppm H ₂ S and 500 and 1,000 ppm hydrocarbons, with the higher level requiring shut-down of drilling or plant operations and the lower level requiring notification to appropriate agencies, including the Hermosa Beach Fire Department and SCAQMD. A meteorological station to monitor wind speed and direction under the guidance and specification of the SCAQMD shall be installed at the site. The Air Monitoring Plan shall be reviewed and approved by the City and the SCAQMD.	Plan review, site inspections	Before Phase 2 operations	SCAQMD City of Hermosa Beach
AQ-5e	The Applicant shall use an odor suppressant spray system on the mud shaker tables, and shall install carbon capture canisters on all tanks (permanent and portable) that are not equipped with vapor recovery, containing potentially odiferous materials (for example; the mud baker-type tanks) for all drilling operations so that no odor can be detected at the closest receptor.	Plan review, site inspections	Before Phase 2 operations	SCAQMD City of Hermosa Beach
AQ-5f	The fugitive component leak detection program under Rule 1173 shall utilize a Leak Detection and Reporting (LDAR) level of monthly detections with an action	Plan review, site inspections	Before Phase 2 operations	SCAQMD City of

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	level of 100ppm, the installation of bellows valves where applicable (valves 2 inches or smaller) and the use of IR cameras or equivalent during monthly detections to ensure that leaking components are minimized at the facility.			Hermosa Beach
AQ-6	<p>The Applicant shall provide credits for all GHG emissions generated above the threshold of 10,000 MTCO_{2e} per year. A GHG Reporting and Reduction Plan shall be submitted to the SCAQMD and the City detailing the measures to be implemented to achieve the required reductions, updated annually, and shall include specifications on the protocol, vintage, and registry for any offsite mitigation. The following mitigation credits shall not require prior City or SCAQMD approval:</p> <ol style="list-style-type: none"> 1. Credits generated within Los Angeles County per an approved SCAQMD protocol; 2. Credits generated within the State of California per an approved SCAQMD protocol; 3. Credits that are generated and verified under the CAPCOA GHG Rx program; 4. Credits that are generated and verified under the voluntary SCAQMD Regulation XXVII; 5. Verified credits registered with the Climate Action Reserve or the American Carbon Registry. <p>In addition, independently verified GHG credits available through other carbon registries that follow specific protocols may be eligible for offsite mitigation, subject to review and prior approval by the City and the SCAQMD. The general criteria for acceptable credits include:</p> <ul style="list-style-type: none"> • Real: emission reduction must have actually occurred, as the result of a project yielding quantifiable and verifiable reductions or removals. • Additional/Surplus: an emission reduction cannot be required by a law, rule, or other requirement. • Quantifiable: reductions must be quantifiable through tools or tests that are reliable, based on applicable methodologies, and recorded with adequate documentation. • Verifiable: The action taken to produce credits can be audited and there is sufficient evidence to show that the reduction occurred and was quantified correctly. 	Plan review, site inspections	Before Phase 4 operations	SCAQMD City of Hermosa Beach

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Mitigation Measure	Requirements	Compliance Verification		
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	<ul style="list-style-type: none"> Enforceable: An enforcement mechanism must exist to ensure that the reduction project is implemented correctly. Permanent: Emission reductions or removals must continue to occur for the expected life of the reduction project. Operational/drilling GHG emissions from stationary and mobile sources shall be quantified and reported to the City and to the SCAQMD annually. Emissions reporting will follow the same reporting format and procedures as required by the Mandatory Reporting Rule.			
AQ-7a	All diesel equipment used at the site shall meet EPA Tier 3 emission requirements and be equipped with a CARB Level 3 diesel particulate filter to reduce Diesel PM emissions. Workover rigs operated at the project site shall have cumulative total DPM emissions below 1.5 lbs/year or shall utilize electric drive/sources .	Plan review, site inspections	Before Phase 4 operations	SCAQMD City of Hermosa Beach
AQ-7b	Vapor recovery on crude oil tanks shall achieve a minimum of 99 percent recovery of fugitive emissions.	Plan review, site inspections	Before Phase 4 operations	SCAQMD City of Hermosa Beach

Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
AQ-1a	The Applicant shall submit and implement a Fugitive Dust Control Plan that includes SCAQMD mitigations for fugitive dust mitigation, according to Rule 403, and SCAQMD CEQA Guidelines. Fugitive dust mitigation measures in the plan shall include the following: <ul style="list-style-type: none"> Apply water every 3 hours to disturbed areas and unpaved roads within a construction site (61 percent reduction). Require minimum soil moisture of 12 percent for earthmoving, by using a moveable sprinkler system or water truck. Moisture content can be verified by lab sample or moisture probe (69 percent reduction). 	Plan review, site inspections	Before and during construction Both Oil Project and City Yard	SCAQMD City of Hermosa Beach

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Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	<ul style="list-style-type: none"> • Limit onsite vehicle speeds on unpaved roads to 15 mph and posting of speed limits. • All trucks hauling dirt, sand, soil, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of 12 inches (91 percent reduction). • Install gravel bed trackout apron (3 inches deep, 25 feet long, 12 feet wide per lane, and edged by rock berm or row of stakes) to reduce mud and dirt trackout from unpaved truck exit routes (46 to 80 percent reduction). • Water storage piles by hand or apply cover when wind events are declared, according to SCAQMD Rule 403 when instantaneous wind speeds exceed 25 miles per hour (90 percent reduction). • Appoint a construction relations officer to act as a community liaison concerning onsite construction issues, such as dust generation. 			
AQ-1b	<p>The Applicant shall implement a NOx reduction program including the following, or equivalent, measures to the satisfaction of the SCAQMD:</p> <ul style="list-style-type: none"> • All off-road construction equipment shall be tuned and maintained according to manufacturers' specifications. • Any temporary electric power shall be obtained from the electrical grid, rather than portable diesel or gasoline generators. • All off-road diesel construction equipment with greater than 100-horsepower engines shall meet Tier 3 NOx requirements. • Limit onsite truck idling to less than 5 minutes. • A copy of the certified tier specification, best available control technology documentation, or the CARB or SCAQMD operating permit for each piece of equipment shall be provided when each piece of equipment is mobilized. 	Plan review, site inspections	Before and during construction	SCAQMD City of Hermosa Beach

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Table 8-3 Biological Resources

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
BIO-1	To minimize potential impacts to nesting native bird species, and in compliance with the federal Migratory Bird Treaty Act and Sections 3503, 3503.5, or 3513 of the California Fish and Wildlife Code, initial vegetation removal/trimming shall be done outside the breeding season (breeding season is defined herein as January 15 through August 31 for raptors and February 15 through August 31 for all non- raptor species). If vegetation removal/trimming must be completed during this period, then surveys for nesting birds must be conducted by a qualified, City-approved Biologist, within 3 days prior to vegetation removal or other construction-related disturbances. If nesting birds are observed within the project area, then a minimum 100-foot buffer from any non-raptor species and 500 foot buffer from any raptor nest would be established and maintained for the duration of vegetation removal/trimming activities or until nestlings fledge from the nest.	Plan review, site inspections	Before and during construction	City of Hermosa Beach
BIO-2	The Applicant shall submit for City approval and shall implement an Emergency Response Plan that would, in compliance with the California State Oil Spill Contingency Plan (CDFW, OSPR 2014), address protection of biological resources and possible revegetation of any areas disturbed during an oil spill or cleanup activities. The Emergency Response Plan shall, at a minimum, include specific measures to avoid impacts to native vegetation and wildlife habitats, plant and animal species, and environmentally sensitive habitat areas during response and cleanup operations. The Emergency Response Plan shall include provisions for containment and cleanup measures and responsibilities. The plan shall contain: <ul style="list-style-type: none"> • Definition of the authorities, responsibilities, and duties of all entities involved in oil removal operations, and methods of emergency action agency coordination during and after an oil spill; • Agreements and statements from all resource agencies involved in an oil response and removal operation; • Procedures and frequencies for regular monitoring and inspections of pipelines and facilities; • Procedures for early detection and timely notification of an oil discharge; 	Plan review	Before construction	City of Hermosa Beach OSPR

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	<ul style="list-style-type: none"> • A description of the necessary onsite equipment and details on the placement of the material required to quickly control, contain, and remove any discharged oil; • Assurance that full resource capability is known and can be committed following a discharge; • A description of sensitive biological resources in the SMB that should be prioritized for clean-up activities in the case of an oil spill into the marine environment; • Actions for after discovery and notification of a discharge; • Procedures to facilitate recovery of damages and enforcement measures. <p>The Emergency Response Plan shall be approved by the California Department of Fish and Wildlife (CDFW) Office of Spill Prevention and Response (OSPR).</p> <p>When habitat disturbance cannot be avoided, the Emergency Response Action Plan shall provide stipulations for development and implementation of site-specific habitat restoration plans and other site-specific and species-specific measures appropriate for mitigating impacts to local populations of special-status wildlife species and to restore native plant and animal communities to pre-spill conditions. Access and egress points, staging areas, and material stockpile areas that avoid specific habitat areas shall be identified. The Emergency Response Action Plan shall include species- and site-specific procedures for collection, transportation and treatment of oiled wildlife.</p> <p>The Emergency Response Plan shall be approved by the City prior to commencing any construction activities.</p>			

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Table 8-4 Cultural Resources

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
CR-1	<p>Prior to beginning demolition of the existing City Maintenance Yard Building, guidelines shall be developed for the careful exposure of extant elements of the historic brick and mortar furnace. Once exposed, detailed documentation of the furnace shall be undertaken. Documentation shall be guided by the Historic American Engineering Record (HAER) standards. This documentation shall include production of high quality 35-mm photographs and plan drawings of building elements exposed, including but not limited to, a floor plan, any character-defining building features, and elevation drawings.</p> <p>All work carried out pursuant to the recordation of the furnace building shall be conducted by, or under the direct supervision of a person or persons meeting, at a minimum, the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-39 as revised in 1994) as an architectural historian. A written report detailing the HAER-like documentation shall be provided to the City upon completion the work. This report shall be produced on archivally stable materials and filed with the Hermosa Beach Historical Society.</p>	Development and implementation of a monitoring and documentation plan by a qualified archaeologist.	During building demolition within areas of recorded historical resources.	Project Proponent and Construction Contractor
CR-2a	The design of the New City Maintenance Yard Building shall be compatible in design, styling, material, and massing of the adjacent City Hall complex. The building design should not attempt to replicate the New Formalist style, but it shall not conflict or contrast with the existing building style. The buildings constructed in the New City Maintenance Yard shall be no more than two stories high. They shall not overpower or overshadow the existing building complex.	Design of the New City Maintenance Building and landscape	Design Phase	Project Proponent and City
CR-2b	The landscaping associated with the proposed New City Maintenance Yard shall replicate the planting types surrounding the City Civic buildings, to the extent possible, in order to blend the new construction into the existing Complex. The final design of both the new building and landscape should be developed in consultation with an historic architect or architectural historian who meets <i>Secretary of the Interior's Professional Qualifications Standards</i> (48 FR 44738-39 as revised in 1994).	Design of the New City Maintenance Building and landscape	Design Phase	Project Proponent and City
CR-3a	Prior to any ground-disturbing activities or building removal within the Proposed Project sites, an Archaeological Monitoring Plan shall be developed by a qualified archaeologist with provision for review and input by concerned Native	Development and implementation	The monitoring plan shall be	Project Proponent and

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	Americans and approval by the City. The Plan will also address worker safety during building demolition and ground disturbing activities and during the implementation of the Remedial Action Plan. The Plan is to include provisions for archaeological and Native American monitoring, detailed documentation of all early twentieth-century artifact-bearing deposits exposed during ground-disturbing site work, and development of a clear collection policy for both prehistoric and historic artifacts, subsequent artifact analysis, reporting of findings, and disposition and/or curation of any significant artifacts recovered. All reports of findings shall be filed with to SCCIC.	of a monitoring plan by a qualified archaeologist in consultation with concerned Native American tribes.	submitted for review by the City of Hermosa Beach and approval prior to beginning development. Plan shall be implemented prior to and during construction.	Construction Contractor
CR-3b	Any significant archaeological deposits remaining in the area of the previous City of Hermosa Beach Dump following over-excavation at the Proposed Oil Development Project site must be protected in place. Stabilization and covering of these archaeological deposits shall be monitored by a qualified historical archaeologist meeting the <i>Secretary of the Interior's Professional Qualifications Standards</i> (48 FR 44738-39 as revised in 1994).	Following construction any remaining archaeological deposits must be stabilized and covered for protection.	Following over-excavation	Project Proponent and Construction Contractor
CR-4	Should Project-related excavations be designed to exceed 45 feet in depth at the City Dump, or depths greater than 15 feet along the pipelines, or otherwise be shown to have the potential to impact intact San Pedro Sand deposits as described above, a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) shall be developed by a qualified paleontologist in consultation with the City and implemented prior to or during Project-related ground disturbing activities. The Plan will also address worker safety during building demolition and ground disturbing activities and during the implementation of the Remedial Action Plan.	A paleontological resource monitoring and mitigation program (PRMMP) for treatment of the paleontological resources will be developed and implemented.	The monitoring plan shall be submitted for review by the City of Hermosa Beach and approval prior to beginning development. Plan shall be implemented prior to and/or	Project Proponent and Construction Contractor

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
			during construction.	
CR-5	<p>Ground-disturbing activities in the area of the discovery shall immediately be halted or redirected. A temporary construction exclusion zone shall be established surrounding the site to allow for further examination and treatment of the find. A City representative shall immediately notify the Los Angeles County Coroner’s office by telephone. By law, the Coroner will determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission who will appoint the Most Likely Descendent (MLD). Additionally, if the remains are determined to be Native American, a plan will be developed regarding the treatment of human remains and associated burial objects and the plan will be implemented under the direction of the MLD.</p>	<p>The Native American Heritage Commission (NAHC) must be contacted by the Los Angeles County Coroner, and a Most Likely Descendant must be designated. Any further treatment of the remains will occur in consultation with the MLD, the NAHC, and a qualified archaeologist.</p>	<p>Upon discovery of human remains.</p>	<p>Project Proponent and Construction Contractor</p>

Table 8-5 Fire Protection and Emergency Response

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
FP-1a	The Applicant shall ensure adequate (3,000-5,000 gpm) water supplies are available from the existing water lines and hydrant system, by extending the 8 inch water main or some other source for water supplies that provides sufficient water supply rates, pressure and duration to comply with codes, standards and requirements of the LACFD and the HBFD. Installation of a fire pump, or installation of a piping connection to area water mains that can supply the flows, may be required to ensure the appropriate water flow and pressure requirements. The Applicant shall ensure that all area hydrants and water supplies are tested annually as to the NFPA standards for water flows and pressures, and shall ensure that the results are reported to the City of Hermosa Beach and the Hermosa Beach Fire Department.	Review of water flow calcs and tests, annual reviews	Before Phase 2	City of Hermosa Beach HBFD
FP-1b	The Applicant shall coordinate with the HBFD to integrate a community alert notification system for the proposed project into the City's existing alert system to automatically notify area residences and businesses in the event of an emergency at the project site that would require residents to take shelter or take other protective actions. The Applicant shall implement programs to ensure that all immediate neighbors are provide ample opportunity to participate in the notification system.	Review and testing of system	Before Phase 2	City of Hermosa Beach HBFD
FP-1c	The Applicant shall fund an additional FTE position at the HBFD, or equivalent, for personnel with specific capabilities in inspection and code compliance associated with oil and gas production facilities. This arrangement shall be to the satisfaction of the HBFD.	Training and hiring completed at HBFD	Before Phase 2	City of Hermosa Beach HBFD
FP-1d	The Applicant shall develop emergency response plans addressing the facility's fire-fighting capabilities pursuant to the most recent NFPA requirements, Los Angeles County Fire Code, LACFD, California Code of Regulation, and API requirements, in coordination with and to the satisfaction of the LACFD and the City of Hermosa Beach Fire Department. These plans shall include, but not be limited to, fire monitor placement, water capabilities, fire detection capabilities, fire foam requirements, facility condition relating to fire-fighting ease and prevention, and measures to reduce impacts to sensitive resources. The plan should also address coordination with local emergency responders and area schools and daycare facilities.	Review and approval of plans	Before Phase 2	City of Hermosa Beach HBFD

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
FP-1e	The Applicant shall ensure that the emergency response planning includes development of evacuation plans of neighbors for an emergency scenario at the facility,. The plan shall be reviewed by the LACFD, HBFD and the City annually and updated as needed. The relevant portions of the plan shall be distributed to the public utilizing a method determined by the reviewing Agencies.	Review of plan revision	Before Phase 2 and Phase 4	City of Hermosa Beach HBFD
FP-1f	The Applicant shall ensure and make funding available to 1) upgrade the dispatch system and procedures within Hermosa/Torrance/Redondo to implement a CAD-to-CAD system to improve dispatch times; and 2) extend the mutual aid agreements to become automatic aid agreements between the Hermosa Beach Fire Department, Redondo Beach Fire Department and the Torrance Fire Department and to include the Torrance HAZMAT unit, or provide for funding to provide additional equipment and to train a sufficient number of Hermosa Beach, Redondo Beach and/or Manhattan Beach Emergency Response personnel to provide first response HAZMAT capabilities.	Review of Mutual Aid agreement revision	Before Phase 2 and Phase 4	City of Hermosa Beach HBFD
FP-1g	The Applicant shall ensure, during Phase 2 and Phase 4, that the site shall have sufficient water containment capabilities, as per guidance and approval of the Fire Department. Area storm drains along 6th Street and Cypress Avenue shall be equipped with flapper-type valves to enable the closure of the storm drain system in the event of potential overflow.	Review of plan and onsite inspections	Before Phase 2 and Phase 4	City of Hermosa Beach HBFD
FP-2a	The Applicant shall ensure that design and construction comply with applicable codes and standards for equipment spacing, particularly those related to flare location and distances to public areas and distances from well drilling equipment to buildings. If this cannot be achieved, additional requirements shall include the construction of thermal radiation barriers or insulation on the crude oil tanks, installation of thermal barriers/walls around the flare stack, increasing the height of the flare stack during drilling, relocation of the flare stack, providing thermal radiation modeling to estimate the impacts of equipment on the crude tanks and process piping and public areas and the design and construction of blast walls as per API 752. Fire rated barriers shall be established, as per LACFD requirements, to ensure that all buildings within 100 feet of well drilling would be protected from thermal radiation. Thermal assessments shall be completed to ensure that the thermal radiation from the flare is within acceptable levels (as per API RP 521) and does not produce damage to other equipment or nearby walls/soundwalls. The design and construction compliance status shall be verified by third-party audits under the	Third party audit report review	Before Phase 2 and Phase 4	City of Hermosa Beach HBFD

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	direction of the City.			
FP-2b	Fire protection measures specific to the crude oil containment system shall be provided, including the installation of manual fire foam systems with automatic detection and notification (to both the operators and the HBFD) capable of foaming in the perimeter of the crude oil containment system, wellhead area and the area immediately adjacent to combustion or spark producing equipment within or immediately adjacent to the crude oil containment area. The system shall be capable of being remotely activated from a safe location in the event of a crude oil fire. The highest level electrical classification achievable shall be designated for all equipment located within the crude oil containment and wellhead area.	Review of design documents	Before Phase 2 and Phase 4	City of Hermosa Beach HBFD

Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
FP-3	The City Public Works Department shall coordinate with the Fire Department to ensure that fire trucks have adequate access to and from the fire station, and that the temporary City Maintenance Yard does not inhibit the ability of the Fire Department to respond to emergencies. This may require the elimination of some parking along Bard Street to ensure adequate room for fire truck turn-arounds, or other measures. Public Works shall incorporate the potential loss of parking into their parking plan.	Review of design documents	Before the start of the temporary facility construction	City of Hermosa Beach HBFD

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Table 8-6 Geological Resources/Soils

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
GEO-1a	In coordination with the Caltech Seismological Laboratory, the Applicant shall install an accelerometer at the Project Site to determine site-specific ground accelerations as a result of any seismic event in the region (Los Angeles/Orange County and offshore waters of the Santa Monica Bay and San Pedro Channel). The drilling operator shall cease operations and inspect all onsite oil field-related pipelines, storage tanks, and other infrastructure following any seismic event that exceeds a ground acceleration at the Project Site of 13 percent of gravity (0.13 g). The drilling operator shall not reinstitute operations at the Project Site and associated pipelines until it can be determined that all oil field infrastructure is structurally sound.	Inspection by a California Registered Civil Engineer	Following any seismic event that results in substantial ground accelerations at the Project Site, as pre-determined by a California-licensed geotechnical engineer.	City of Hermosa Beach
GEO-1b	All seismic related recommendations provided by NMG Geotechnical (2012) shall be incorporated into the Proposed Oil Project design. These measures shall include, but not be limited to the following: - Drilled-in-place piles or cast-in-drilled-hole piles shall be constructed for foundations in the landfill area, i.e., northeast Project Site, to reduce seismically induced settlement. - Ground improvement techniques, including high pressure grout injection, i.e., compaction grouting, shall be used in the landfill area to reduce seismically induced settlement and allow construction of conventional shallow foundations. - Seismic design criteria for horizontal and vertical accelerations, identified in Tables 10 and 11 of the geotechnical report, shall be used during Proposed Project design (including incorporation of updated seismic design criteria from the 2013 California Building Code). - During Phase 1, the upper 2 to 4 feet of soil in the vicinity of the proposed well cellars shall be excavated and replaced with compacted fill. In addition, the basement under the maintenance building shall be removed and filled in with compacted fill. In addition, the basement under the maintenance building shall be removed and filled in with compacted fill. - During Phase 3, the eastern portion of the site shall be excavated	Review and approval of geotechnical report.	Approve geotechnical report prior to issuance of grading permit.	City of Hermosa Beach

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	<p>approximately 7 feet deeper than the majority of the proposed building pad, with a minimum of 3 feet of overexcavation below design grades, and recompacted to provide a uniform fill blanket below proposed tanks, compressors, and other equipment.</p> <p>- Asphalt pavement and underlying subgrade soils shall be designed to accommodate the proposed drill rig.</p> <p>Positive surface drainage shall be provided to direct runoff away from slopes and structures and toward suitable drainage devices. Ponding of water on structural pads shall not be allowed.</p>			
GEO-2a	<p>Injection pressures associated wastewater injection shall not exceed reservoir fracture pressures as specified in California Code of Regulations Title 14, Division 2, Section 1724.10, and as approved by the California Division of Oil, Gas, and Geothermal Resources..</p>	<p>Comparing pressure measurements on each injection well to formation fracture pressure</p>	<p>During waste water injection operations</p>	<p>California Division of Oil and Gas and Geothermal Resources (DOGGR) and Hermosa Beach Public Works Department</p>
GEO-2b	<p>In coordination with the Caltech Seismological Laboratory, the Applicant shall install an accelerometer at the Project Site to determine site-specific ground accelerations as a result of any seismic event in the region (Los Angeles/Orange County and offshore waters of the Santa Monica Bay and San Pedro Channel). Readings from the accelerometer shall be recorded at the Oil Field and transmitted in real-time to the Caltech Seismological Laboratory. The drilling operator shall cease operations and inspect all onsite oil field-related pipelines, storage tanks, and other infrastructure following any seismic event that exceeds ground acceleration at the Project Site of 13 percent of gravity (0.13 g). The drilling operator shall not reinstitute operations at the Project Site and associated pipelines until it can be determined that all oil field infrastructure is structurally sound.</p>		<p>Monthly</p>	<p>City of Hermosa Beach</p>
GEO-2c	<p>In the event that monitoring indicates that Proposed Oil Project-induced seismicity is occurring, wastewater injection operations shall be adjusted to alleviate such seismicity. The drilling operator shall first receive approval from</p>	<p>Seismicity monitoring</p>	<p>Following monthly monitoring, as</p>	<p>City of Hermosa Beach</p>

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	the California Division of Oil, Gas, and Geothermal Resources prior to any change (increase) in the injection operations.		necessary	
GEO-3	All slope stability related recommendations provided by NMG Geotechnical (2012) shall be incorporated into the Proposed Oil Project design. Temporary excavations shall be stabilized per the latest edition of Cal/OSHA requirements for loose sands, including shoring or laying back of trench walls. Shoring along the northern perimeter of the Project Site shall be designed by an experienced structural engineer due to the proximity to existing buildings that must be protected from potential settlement and lateral movements.	Submit temporary shoring plans and calculations.	Prior to permit issuance	City of Hermosa Beach
GEO-4a	Prior to approval of the first drilling permit, the Applicant shall have submitted and the City of Hermosa Beach and the California Coastal Commission shall have approved a Subsidence Monitoring and Avoidance Program, for both onshore and offshore areas. The onshore monitoring plan shall be completed throughout the life of this project, in accordance with Appendix A, Subsidence Monitoring Program, of the Subsidence and Induced Seismicity Technical Report, E&B Oil Development Project (Geosyntec Consultants 2012), included as Appendix _F of this EIR. The offshore monitoring plan shall be completed throughout the life of this project in accordance with the Offshore Subsidence Monitoring Program and Possible Mitigation Measures, Hermosa Beach, California (Coastal Environments 1998), included as Appendix _F of this EIR. The latter shall be updated, as applicable, to reflect advances in science since 1998. <u>In addition, Section 7.6, Mitigation of Onshore Subsidence, of the latter report, shall not be applied to this mitigation measure, as the onshore monitoring program would be completed in accordance with the Geosyntec Consultants (2012) report.</u>	Monitor subsidence with GPS technology.	Annually	Hermosa Beach Public Works Department
GEO-4b	The Subsidence Monitoring Program shall include: Ground elevation survey methodologies with high vertical resolution; <u>including onshore surface elevations and offshore bathymetric elevations;</u> Prior to Phase II drilling, establishment of a network of onshore and offshore survey or subsidence monitoring locations, including continuous GPS stations, GPS benchmarks, and tautly anchored offshore monitoring points, positioned within the City, outside the City, and in offshore areas, that are sufficiently spaced to draw conclusions about subsidence within the zone of influence of	Monitor subsidence with GPS technology.	Annually	Hermosa Beach Public Works Department

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	<p>the Project;</p> <p>Because subsidence can occur for a variety of reasons, establishment of control points outside the zone of influence to allow differentiation of possible subsidence effects related to other activities;</p> <p>Use of InSAR imagery technology to evaluate regional subsidence patterns both within and beyond the proposed oil field;</p> <p>Sufficient monitoring frequency to establish trends in subsidence in order to distinguish background ground movement from any subsidence caused by proposed oil field operations;</p> <p>Reservoir monitoring, including documentation of produced fluid volume (oil, gas and water) and reservoir pressures at similar frequency to ground elevation measurements;</p> <p>Reporting requirements; and</p> <p>Action levels, as specified in the onshore and offshore subsidence monitoring reports.</p> <p>Surveying for both vertical and horizontal ground movement shall be completed along the perimeter and throughout the interior of the oil field, including both onshore and offshore areas, utilizing Global Positioning System technology in combination with a network of ground stations. The onshore continuous monitoring GPS stations shall include:</p> <p>Hermosa Beach Pier. The pier will serve as the furthest offshore point in the onshore monitoring program.</p> <p>Longfellow Outfall. This Outfall is larger and more structurally stable than some of the other outfalls along the City's coast.</p> <p>King Harbor Jetty. This location was selected to achieve a distribution of continuous monitoring points along the coast of Hermosa Beach. This will help provide a limited regional picture of the subsidence between survey events.</p>			
GEO-4c	<p>An onshore and offshore baseline subsidence report shall be completed and made available to the City of Hermosa Beach and the California Coastal Commission at least two months and no more than six months prior to planned commencement of Phase II drilling operations. Subsidence monitoring reports shall be completed annually and the results shall be forwarded to the California Coastal Commission and the City of Hermosa Beach for review, no more than one month following the end of each annual monitoring cycle. In addition,</p>	<p>Coordinate with Hermosa Beach Public Works Department</p>	<p>At least two months prior to Phase 2 drilling operations</p>	<p>Hermosa Beach Public Works Department</p>

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Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	results shall be forwarded to the adjoining City of Redondo Beach and City of Manhattan Beach.			
GEO-4d	In the event that the Global Position System monitoring indicates that significant subsidence, as defined by the onshore and offshore subsidence monitoring reports described in GEO-4a, is occurring in and/or around the Proposed Project area, wastewater or water reinjection operations shall be increased to alleviate such subsidence. The Applicant shall coordinate with the California Division of Oil, Gas and Geothermal Resources, which will approve increased levels of wastewater or water reinjection operations in accordance with the approved Subsidence Monitoring Program. The Applicant will also coordinate with the City of Hermosa Beach, Public Works Department, to verify that subsidence has been mitigated sufficiently. The Applicant will also coordinate with the City of Hermosa Beach, Public Works Department, to verify that subsidence has been mitigated sufficiently.	Coordinate with California Division of Oil and Gas and Geothermal Resources (DOGGR)	Following monitoring results indicating subsidence	California Division of Oil and Gas and Geothermal Resources (DOGGR) and Hermosa Beach Public Works Department
GEO-4e	In the unlikely event that subsidence related mitigation induces seismicity, corrective actions related to subsidence shall proceed until baseline surface elevations have been achieved, as subsidence related damage would likely be more pronounced in comparison to damage associated with Project related micro-seismicity. Upon reestablishment of baseline elevations, drilling operations shall cease until a balance between subsidence avoidance and induced seismicity avoidance can be established, as agreed upon by the California Division of Oil, Gas and Geothermal Resources, the California Coastal Commission, and the City of Hermosa Beach.	Coordinate with California Division of Oil and Gas and Geothermal Resources (DOGGR)	Following monitoring results indicating subsidence	California Division of Oil and Gas and Geothermal Resources (DOGGR) and Hermosa Beach Public Works Department
GEO-6	A Registered Civil Engineer shall analyze surficial and near-surface soils at the Project Site subsequent to grading and prior to on-site construction, to determine whether expansive soils are present. Similarly, soils at the Proposed City Maintenance Yard Project Site and along the proposed pipeline route shall be analyzed for soil expansion potential. In the event that clay-rich, expansive soils are present, foundations shall be designed to accommodate expansive soils and pipelines shall be placed within a blanket of non-expansive soils to prevent structural damage and/or failure. Foundation and pipeline design shall be <u>reviewed and approved</u> by a Registered Civil Engineer.	Soil auger and analytical laboratory	Prior to final design	City of Hermosa Beach
GEO-7a	Proposed Oil Project design must conform to the recommendations of HDR	Design for	Prior to final	City of

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	Schiff (2012), included within Appendix C in NMG Geotechnical (2012), or as per the City Engineer, and should occur prior to completion of the final Project design.	protection against corrosion	design	Hermosa Beach
GEO-7b	All buried metal pipelines shall be coated and placed under impressed cathodic protection. To monitor for internal corrosion, corrosion coupons or equivalent measures can be utilized.	Under impressed cathodic protection	Prior to final design	City of Hermosa Beach
GEO-7c	External pipe inspections shall be conducted for the exposed pipeline sections to ensure atmospheric coatings are in good conditions. All external inspections shall be documented and reviewed by the operations management and repairs documented, when necessary.	Visual inspections	Monthly	City of Hermosa Beach
GEO-7d	In accordance with California Division of Oil, Gas, and Geothermal Resources pipeline regulations (Public Resources Code Sections 3013 and 3782), a pipeline management plan shall be implemented for the Project Site. Similarly, in accordance with United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration regulations, a pipeline management plan shall be implemented for proposed pipelines located beyond the perimeter of the Project Site. These plans shall include, but not be limited to mechanical testing, including ultrasonic and hydrostatic testing.	Prepare under guidance of California Department of Conservation Division of Oil, Gas, and Geothermal Resources and United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration	Prior to final design	California Division of Oil and Gas and Geothermal Resources (DOGGR), United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration, and Cities of Hermosa Beach, Redondo Beach, and Torrance

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Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
GEO-7e	All concrete in contact with the high sulfate or corrosive soils shall be Type V concrete in accordance with the 2010 California Building Code.	Pour proper concrete adjacent to corrosive soils	During construction	City of Hermosa Beach

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City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
GEO-1c	A Registered Civil Engineer and Certified Engineering Geologist shall complete a geotechnical investigation specific to the Proposed City Maintenance Yard Project structures. All geotechnical recommendations provided in the report shall be followed during grading and construction at the site. The geotechnical evaluation shall include, but not be limited to, an estimation of both vertical and horizontal anticipated peak ground accelerations.	Review and approval of geotechnical report.	Approve geotechnical report prior to issuance of grading permit for Phase 3 City Maintenance Yard.	City of Hermosa Beach
GEO-6	A Registered Civil Engineer shall analyze surficial and near-surface soils at the Project Site subsequent to grading and prior to on-site construction, to determine whether expansive soils are present. Similarly, soils at the Proposed City Maintenance Yard Project Site and along the proposed pipeline route shall be analyzed for soil expansion potential. In the event that clay-rich, expansive soils are present, foundations shall be designed to accommodate expansive soils and pipelines shall be placed within a blanket of non-expansive soils to prevent structural damage and/or failure. Foundation and pipeline design shall be <u>reviewed and approved</u> by a Registered Civil Engineer.	Soil auger and analytical laboratory	Prior to final design	City of Hermosa Beach

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Table 8-7 Safety, Risk of Upset and Hazards

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
SR-1a	The Applicant shall cause to be prepared an independent third-party audit, under the direction and supervision of the City, of the gas and crude oil plants and pipelines, once constructed, including the well pads, to ensure compliance with Fire Code, applicable API and NFPA codes, EPA RMP, OSHA PSM, DOGGR and SPCC and emergency response plans requirements. All audit items shall be implemented in a timely fashion, and the audit shall be updated annually, as directed by the City and the Los Angeles County Fire Departments. The final installation of the facilities shall include a seismic assessment, including walkthroughs, of equipment to withstand earthquakes prepared by a registered Structural Engineer in compliance with Local Emergency Planning Committee Region 1 CalARP guidance and the seismic assessment shall be updated, with walkthrough inspections, annually to ensure compliance with the codes and standards at the time of installation.	Review of audit reports	Before Phase 4 operations and annually thereafter	LACFD HBFD Cities of Redondo Beach and Torrance
SR-1b	The Applicant shall ensure that the crude oil spill containment areas shall be designed as Class I Division I areas according to NFPA and NEC, or that spark producing equipment (such as the flare) would be isolated from the containment area, in order to reduce the potential for crude oil fires. The refrigeration system shall utilize non-flammable refrigerant.	Review of design documents	Before Phase 3 construction	City of Hermosa Beach HBFD Cities of Redondo Beach and Torrance
SR-1c	The Applicant shall ensure that all crude-oil truck haulers and a sufficient number of onsite personnel (at least two per shift) are trained in HAZMAT (to the HAZWOPER technician level at least) spill response and that each truck carries a spill response kit.	Site inspections, review of contracts	Before Phase 2 drilling	City of Hermosa Beach HBFD Cities of Redondo Beach and Torrance

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
SR-1d	The Applicant shall install automatic valves on the gas pipeline that will automatically shut down under a low pressure scenario at the Processing Facility Area for all pipelines leaving the processing plant, and shall install a backflow prevention device at the main gas pipeline tie-in location, to prevent the release of gas from the main transmission pipeline in the event of a rupture in the gas pipeline. The second, return pipeline shall remain isolated from the main gas pipeline during normal operations.	Review of design documents	Before Phase 3 construction	City of Hermosa Beach HBFD Cities of Redondo Beach and Torrance
SR-1e	The Applicant shall ensure that warning tape is installed above the pipelines within the pipeline trench to warn third parties that pipelines are located below the warning tape and that the pipelines are capable of utilizing a smartpig.	Review of design documents	Before Phase 3 construction	City of Hermosa Beach HBFD Cities of Redondo Beach and Torrance
SR-1f	The odorant system shall have its own, smaller containment area around it limiting the spilled pool size to the minimum size attainable, in order to prevent any offsite impacts. Transfer of odorant shall utilize carbon canisters and a canister change-out/maintenance program to ensure that filling of odorant tanks do not cause offsite impacts.	Review of design documents	Before Phase 3 construction	City of Hermosa Beach HBFD
SR-1g	The comingled produced gas shall be continuously monitored for hydrogen sulfide. If H ₂ S levels in the produced gas from any individual well exceeds 100 ppm, then that well shall be shut in and abandoned as per DOGGR requirements. Wells shall be tested when fluids first flow, when the well is placed into production and periodically thereafter in order to ensure that all wells operate below 100 ppm H ₂ S.	Review of design documents and in-field inspections	Before Phase 2 drilling	City of Hermosa Beach HBFD Cities of Redondo Beach and Torrance

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
SR-2	The Applicant shall sample soil during Phase 1 grading to ensure that soil lead contamination levels are below 9,500 mg/kg and that soil contaminated with TPH are below the regulatory guidelines. If soils are encountered above these levels, then those soils shall be removed from the site and transported to a disposal site. This may necessitate implementing the RAP during Phase 1 if substantial amounts of contamination are encountered.	Review of design documents and in-field inspections	Phase 1	City of Hermosa Beach

Table 8-8 Hydrology and Water Quality

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
HWQ-2a	The Applicant shall properly maintain the associated crude oil pipelines, storage tanks, and processing facilities within and outside the Project Site, including smart-pigging according to State of California Office of the State Fire Marshal requirements and the standards outlined by the Department of Oil, Gas and Geothermal Resources, and the Los Angeles Regional Water Quality Control Board. The Applicant shall inspect storage tank and processing equipment at least daily and pipeline inspections on a weekly basis.	Review of maintenance reports	Before Phase 4 operations Annually	Cities of Hermosa Beach, Redondo Beach, and Torrance
HWQ-2b	The Applicant shall install a leak detection system for crude pipelines to the Exxon Mobil Refinery. The system shall include pressure and flow meters, flow balancing, supervisor control and data acquisition system, and a computer alarm system in the event of a suspected leak. Temperature, pressure, and flow shall be monitored at each pipeline entry and exit. If any variable deviates by more than 10 percent of the normal operating range, the system shall trigger both audible and visual alarms. Flow balancing shall be conducted every 5 minutes, 1 hour, 24 hours, and 48 hours with the accuracy defined once the system is established and tested.	Review of system design and testing results	Before Phase 4 operations	Cities of Hermosa Beach, Redondo Beach, and Torrance
HWQ-2c	Personnel at the site shall be trained in equipment use and containment and cleanup of an oil spill. Dry cleanup methods, such as absorbents, shall be used on paved and impermeable surfaces and shall be included in a spill trailer maintained onsite. Spills in dirt areas shall be immediately contained with an earthen dike and the contaminated soil shall be dug up and discarded in accordance with local and state regulations.	Review of training and equipment	Before Phase 2 and Phase 4 operations and <u>intermittently thereafter</u>	Cities of Hermosa Beach, Redondo Beach, and Torrance
HWQ-2d	Oil spills shall be contained and cleaned according to measures outlined in the then-current California Stormwater Quality Association Best Management Practice Handbook.	Review of training and incident reports	Before Phase 2 and Phase 4 operations, and intermittently thereafter	Cities of Hermosa Beach, Redondo Beach, and Torrance

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
HWQ-2e	A United States Environmental Protection Agency, Spill Prevention, Control, and Countermeasure Plan, approved by the City of Hermosa Beach Fire Department, shall be implemented in the event of a spill. The Plan, which shall include a spill response trailer, equipment, and personnel training shall be completed prior to Phase 2 and Phase 4, and in compliance with the California State Oil Spill Contingency Plan (California Department of Fish and Game, Office of Spill Prevention and Response 2010) and the Los Angeles/Long Beach Oil Spill Contingency Plan (California Department of Fish and Wildlife 2011). Spill cleanup shall be completed under the oversight of the lead regulatory agency, with respect to oil spills, as identified in the Spill Prevention, Control, and Countermeasure Plan.	Review of reports	Before Phase 2 and Phase 4 operations	Cities of Hermosa Beach, Redondo Beach, and Torrance
HWQ-2f	The well cellar shall be lined with an impermeable membrane to prevent oil-based substances from seeping into groundwater supplies. All drilling muds storage shall be contained within Baker-type enclosed tanks, which shall be sized to accommodate high intensity rainfall events without overtopping.	Review of design documents, field inspection	Before Phase 2 and Phase 4 operations	Cities of Hermosa Beach, Redondo Beach, and Torrance
HWQ-2g	The Applicant shall install a check valve in the crude oil pipeline at the Herondo and Valley drive where the crude oil pipeline turns eastward and starts uphill.	Review of design documents, field inspection	Before Phase 4 operations	Cities of Hermosa Beach, Redondo Beach, and Torrance
HWQ-2h	The Applicant shall fund and install, under the direction of the Hermosa Beach Public Works Department, an oil/grit separators or oil/water separator located along Herondo Street downstream of Valley Drive, in order to capture small to medium sized spills before they reach the ocean. Installation and maintenance costs shall be provided by the Applicant and the devices shall be inspected by the Applicant to ensure that the "trap" is operational before any storm events.	Review of design documents, field inspection	Before Phase 4 operations, and intermittently thereafter	Cities of Hermosa Beach, Redondo Beach, and Torrance
HWQ-2i	The Applicant shall utilize a smaller 6" ERW pipe and a heat and impact resistant coating at a minimum comparable to a 3-layer fusion bonded epoxy (such as BrederoShaw 3LPP) and weld coverings equivalent to sleeves with epoxy primer. Specification of the pipe and coating shall approved by the City.	Review of design documents, field inspection	Before Phase 4 operations	City of Hermosa Beach, CSFM

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
HWQ-2j	The Applicant shall install a 3 sack slurry starting 6 inches above the pipe to the base of the pavement or ground surface and lay strips of warning tape over the top to prevent third-party damage.	Review of design documents, field inspection	Before Phase 4 operations	City of Hermosa Beach

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Table 8-9 Noise and Vibration

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
NV-1a	Increase the height of the noise barrier on all sides of the site to 24-feet (24-feet is the maximum feasible height for a noise barrier during Phase 1). Minimum sound insulation performance of the barrier shall remain at STC-25.	Review of design documents and in-field inspections	Before Phase 1	City of Hermosa Beach
NV-1b	The gates on the east and south sides of the site shall be 24-feet high, consistent with the height of the acoustical barrier around the perimeter of the site. The gates shall have no holes or gaps in them and shall be designed to deliver a minimum sound insulation performance of STC-25.	Review of design documents and in-field inspections	Before Phase 1	City of Hermosa Beach
NV-1c	All acoustical barriers around the site shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.49, 0.72, 0.74, 0.29, 0.21, 0.14.	Review of design documents and in-field inspections	Before Phase 1	City of Hermosa Beach
NV-2a	Increase the height of the noise barriers on all sides of the site from 32-feet to 35-feet (35-feet is the maximum height allowed). Minimum sound insulation performance of the barrier material should be STC-32.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-2b	The gates on the east and south sides of the site shall have no holes or gaps in them and shall be designed to deliver a minimum STC of 32. Any gaps above the gates must be closed off, by extending the acoustical barrier material from the sides. The intent is to maintain the acoustical integrity of the STC-32 noise barrier in all locations.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-2c	All acoustical barriers around the site shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.49, 0.72, 0.74, 0.29, 0.21, 0.14.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
NV-2d	Install pads on the V-door and other appropriate areas, timbers and pads on the drill deck, pads between drill and casing pipe while in storage and pad and timbers at the boards on the mast to reduce metal-on-metal noise.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-2e	Provide full acoustical enclosures around the mud pumps. The enclosures shall be factory-assembled by a manufacturer with a proven track-record of building noise-reducing enclosures for industrial applications. The total sound power level radiated by the enclosure shall not exceed 77 dBA, including noise contributions from: the access door(s), observation windows, ventilation openings and ventilation fans (if required).	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-2f	Provide enhanced inlet and outlet silencers for the Hydraulic Power Unit enclosure and upgrade the walls, roof and floor of the enclosure as necessary to limit the total sound power level radiated by the enclosure to 77 dBA.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-2g	The acoustical shroud around the drilling mast shall be comprised of acoustical blankets with a minimum STC rating of 25. The acoustical blankets shall provide continuous coverage of three sides of the mast and shall cover the uppermost 26-feet of the fourth side.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-2h	Provide acoustical treatment within the combustor fan housing and/or at the ventilation openings, as necessary to limit the total sound power level radiated by the housing (including contributions from the door and ventilation openings) to 86 dBA.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-2i	Eliminate use of the combustor during drilling in Phase 2	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
NV-2j	During the drilling portion of Phase 2, implement a “Super-Quiet Mode” of operation between the hours of 2AM and 5AM, during which time drilling would essentially be suspended to minimize noise. Super-Quiet Mode would impose the following additional measures and limitations: no pipe-handling of any kind anywhere on the project site, shakers switched off, top drive and rig floor completely enclosed on four sides by acoustical blankets with a minimum STC rating of 25, operation of the top drive limited to “exercising” the pipe string only, top drive travel limited to the bottom half of the drilling rig mast. Super-Quiet Mode shall be implemented from the outset of drilling work during Phase 2; however, if monitoring shows consistently that noise emissions for normal drilling operations (with mitigation measures NV2a through NV2i in place) would result in less-than-significant impact during all or part of the period between 2AM and 5AM, the Applicant may, at the discretion of the City, be permitted to reduce the hours Super-Quiet Mode operations, or eliminate Super-Quiet Mode altogether.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-3a	Increase the height of the noise barriers on all sides of the site from 32-feet to 35-feet (35-feet is the maximum height allowed). Minimum sound insulation performance of the barrier material should be STC-32.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-3b	The gates on the east and south sides of the site shall have no holes or gaps in them and shall be designed to deliver a minimum STC of 32. Any gaps above the gates must be closed off, by extending the acoustical barrier material from the sides. The intent is to maintain the acoustical integrity of the STC-32 noise barrier in all locations.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-3c	All acoustical barriers around the site shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.49, 0.72, 0.74, 0.29, 0.21, 0.14.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
NV-3d	Provide acoustical treatment within the combuster fan housing and/or at the ventilation openings, as necessary to limit the total sound power level radiated by the housing (including contributions from the door and ventilation openings) to 86 dBA.	Review of design documents and in-field inspections	Before Phase 2	City of Hermosa Beach
NV-4a	Increase the height of the noise barrier on all sides of the site to 24-feet (24-feet is the maximum feasible height for a noise barrier during Phase 3). Minimum sound insulation performance of the barrier shall remain at STC-25.	Review of design documents and in-field inspections	Before Phase 3	City of Hermosa Beach
NV-4b	The gates on the east and south sides of the site shall be 25-feet high, consistent with the height of the acoustical barrier around the perimeter of the site. The gates shall have no holes or gaps in them and shall be designed to deliver a minimum sound insulation performance of STC-25.	Review of design documents and in-field inspections	Before Phase 3	City of Hermosa Beach
NV-4c	All acoustical barriers around the site shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.49, 0.72, 0.74, 0.29, 0.21, 0.14.	Review of design documents and in-field inspections	Before Phase 3	City of Hermosa Beach
NV-6a	Increase the height of the noise barriers on all sides of the site from 32-feet to 35-feet (35-feet is the maximum height allowed by zoning code). Minimum sound insulation performance of the barrier material shall be STC-32.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach
NV-6b	The gates on the east and south sides of the site shall have no holes or gaps in them and shall be designed to deliver a minimum STC of 32. Any gaps above the gates must be closed off, by extending the acoustical barrier material from the sides. The intent is to maintain the acoustical integrity of the STC-32 noise barrier in all locations.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach

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Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
NV-6c	All acoustical barriers around the site shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.49, 0.72, 0.74, 0.29, 0.21, 0.14. In the event that a permanent 35-foot wall is built, the interior surfaces of the wall (i.e. those facing inwards towards the drilling and production operations) shall be treated with exterior grade acoustical panels offering equivalent sound absorption performance to that specified in this Measure above a height of 10-feet from the ground.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach
NV-6d	Install pads on the V-door and other appropriate areas, timbers and pads on the drill deck, pads between drill and casing pipe while in storage and pad and timbers at the boards on the mast to reduce metal-on-metal noise.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach
NV-6e	Provide full acoustical enclosures around the mud pumps. The enclosures shall be factory-assembled by a manufacturer with a proven track-record of building noise-reducing enclosures for industrial applications. The total sound power level radiated by the enclosure shall not exceed 77 dBA, including noise contributions from: the access door(s), observation windows, ventilation openings and ventilation fans (if required).	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach
NV-6f	Provide enhanced inlet and outlet silencers for the Hydraulic Power Unit enclosure and upgrade the walls, roof and floor of the enclosure as necessary to limit the total sound power level radiated by the enclosure to 77 dBA.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach
NV-6g	The acoustical shroud around the drilling rig mast shall be comprised of acoustical blankets with a minimum STC rating of 25. The acoustical blankets shall provide continuous coverage of three sides of the mast and shall cover the uppermost 26-feet of the fourth side.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
NV-6h	During the drilling portion of Phase 4, implement a “Super-Quiet Mode” of operation between the hours of 2AM and 5AM, during which time drilling would essentially be suspended to minimize noise. Super-Quiet Mode would impose the following additional measures and limitations: no pipe-handling of any kind anywhere on the project site, shakers switched off, top drive and rig floor completely enclosed on four sides by acoustical blankets with a minimum STC rating of 25, operation of the top drive limited to “exercising” the pipe string only, top drive travel limited to the bottom half of the drilling rig mast. Super-Quiet Mode shall be implemented from the outset of drilling work during Phase 4; however, if monitoring shows consistently that noise emissions for normal drilling operations (with mitigation measures NV6a through NV6g in place) would result in less-than-significant impact during all or part of the period between 2AM and 5AM, the Applicant may, at the discretion of the City, be permitted to reduce the hours of Super-Quiet Mode operations, or eliminate Super-Quiet Mode altogether.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach
NV-7a	Increase the height of the masonry walls on the north and west sides of the site to a minimum of 27-feet.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach
NV-7b	Apply outdoor acoustical panels to all available surfaces of the north and west walls that face the production operations above a height of 10-feet above the ground. The purpose of the acoustical panels is to control reflection of production noise in the direction of the sensitive uses to the east and south. The acoustical panels shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.28, 0.68, 0.95, 0.86, 0.89, 0.72.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach
NV-7c	Well workover rigs shall be powered by electric drive/sources or “ultra-quiet” generators or engines - either diesel or natural gas-powered - that are capable of operating below the noise significance thresholds for daytime operation.	Review of design documents and in-field inspections	Before Phase 4	City of Hermosa Beach

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Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
NV-8a	Provide a continuous, 25-foot high noise control barrier along the north, west and south boundaries of the City Yard site. Minimum sound insulation performance of the barrier material should be STC-32.	Review of design documents and in-field inspections	Before Phase 3 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-8b	Provide a continuous, 16-foot high noise control barrier along the east boundary of the site. Minimum sound insulation performance of the barrier material shall be STC-25.	Review of design documents and in-field inspections	Before Phase 3 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-8c	Access to the site for construction shall be limited to a gate on the east side in order to maintain the integrity of the noise barrier on the north side. Gates shall be constructed of solid (no holes) plywood or sheet metal and be designed to deliver a minimum sound insulation performance of STC-25. Any gaps above the gates must be closed off, by extending the acoustical barrier material from the sides. The intent is to maintain the acoustical integrity of the STC-25 noise barrier.	Review of design documents and in-field inspections	Before Phase 3 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-8d	All acoustical barriers around the site shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.49, 0.72, 0.74, 0.29, 0.21, 0.14.	Review of design documents and in-field inspections	Before Phase 3 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-9a	Increase the height of the masonry wall on the west side of the Yard (the wall that spans between the office and shop building) from 6-feet to 12-feet.	Review of design documents and in-field inspections	Before Phase 3 Proposed City Maintenance Yard Project	City of Hermosa Beach

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
NV-9b	No noise-producing activity allowed in the City Yard before 8AM or after 7PM on weekdays and anytime on Saturdays and Sundays except during emergencies.	Review of schedules and in-field inspections	Before Phase 3 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-9c	For the Parking Option, there shall be no openings in the parking structure enclosure except for the vehicular entrance/exit opening on the north side. The entrance/exit should be located as far to the east as possible, to maximize its distance from the homes on Cypress Avenue. Garage exhaust fans shall be enclosed and fitted with duct silencers on the discharge and intake sides as necessary to limit noise emissions to less than significant levels at the nearby sensitive receivers.	Review of schedules and in-field inspections	During Phase 3 Yard Operation	City of Hermosa Beach
NV-10a	Provide a continuous, 25-foot high noise control barrier on the north, west and south sides of the site and along those parts of the site boundary adjacent to City Hall. Minimum sound insulation performance of the barrier material should be STC-32. If visual and light concerns preclude a 25-foot high noise control barrier close to City Hall - because of visual and light concerns - the noise barrier here should be as tall as possible.	Review of design documents and in-field inspections	Before Phase 1 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-10b	Provide a continuous, 16-foot high noise control barrier along the east boundary of the site. Minimum sound insulation performance of the barrier material should be STC-25.	Review of design documents and in-field inspections	Before Phase 1 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-10c	Access to the site for construction shall be limited to a gate on the east side in order to maintain the integrity of the noise barrier on the north side. Gates shall be constructed of solid (no holes) plywood or sheet metal and be designed to deliver a minimum sound insulation performance of STC-25. Any gaps above the gates must be closed off, by extending the acoustical barrier material from the sides. The intent is to maintain the acoustical integrity of the STC-25 noise barrier.	Review of design documents and in-field inspections	Before Phase 1 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-10d	All acoustical barriers around the site shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.49, 0.72, 0.74, 0.29, 0.21, 0.14.	Review of design documents and in-field	Before Phase 1 Proposed City Maintenance	City of Hermosa Beach

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Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
		inspections	Yard Project	
NV-11a	Increase the height of the concrete block Yard wall along the west and south sides of City Hall from 8-feet to 16-feet.	Review of design documents and in-field inspections	Before Phase 1 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-11b	Apply outdoor acoustical panels to the extended wall surfaces facing the Yard above a height of 8-feet above the ground. The purpose of the acoustical panels is to control reflection of operational noise in the direction of the sensitive uses to the west and south. The acoustical panels shall offer the following minimum sound absorption performance: Center Frequency (Hz), 125, 250, 500, 1k, 2k, 4k - Sound Absorption Coefficient, 0.28, 0.68, 0.95, 0.86, 0.89, 0.72.	Review of design documents and in-field inspections	Before Phase 3 Proposed City Maintenance Yard Project	City of Hermosa Beach
NV-11c	No noise-producing activity allowed in the temporary City Yard before 8 A.M. or after 7 P.M. on weekdays and anytime on Saturdays and Sundays except during emergencies.	Review of schedules and in-field inspections	Before Phase 3 Proposed City Maintenance Yard Project	City of Hermosa Beach

Table 8-10 Transportation and Circulation

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
TR-1a	For Phases 1-3, the Applicant shall fund, through and in consultation with the School District and Safe Routes to School, an afternoon crossing guard to be stationed at the Project Site area to ensure pedestrians passing nearby the Project Site have assistance in crossing the streets and the entrances/exit of the Project Site. Alternately, the Applicant shall ensure that trucks do not travel to and from the Project Site unless school is in session (i.e. truck travel prohibited on Valley Drive after 2:48 p.m., on Wednesdays after 1:45 p.m. or on school minimum days after 12:45 p.m.). The Applicant shall consult with the School District to ensure timing is current.	Review of contracts and site inspections	Prior to construction activities	City of Hermosa Beach
TR-1b	For Phases 1-3, the Applicant shall install, subject to the approval of the City Public Works Department, warning signs and blinking yellow lights one block north and south (if applicable with possible one-way on Valley Drive) of the Project Site warning vehicle traffic that trucks may be entering and exiting the roadway. Blinking lights shall only operate when trucks are utilizing the roadway (not 24 hours per day).	Review of design documents and site inspections	Prior to construction activities	City of Hermosa Beach
TR-1c	The Applicant shall ensure that all trucks accessing the Project Site and utilizing the Pier Avenue/Valley Drive intersection are less than 65 feet long to prevent safety hazards at the double intersection on Pier Avenue between Valley Drive and Ardmore Avenue. If trucks longer than 65 feet are required, then flagger shall be used at the Pier Avenue and Valley/Ardmore intersection.	Review of contracts and site inspections	Phase 1-4 Prior to construction activities	City of Hermosa Beach
TR-1d	For Phases 1-3, the Applicant shall, with the approval and coordination of the City Public Works Department, either 1) restripe Valley Drive south of Pier Avenue to be a southerly directed one-way street. No on-street parking shall be allowed on Valley Drive between 6th Street and 8th Street to allow for sufficient line of sight for trucks entering and exiting the Project Site; or 2) restripe the section of Valley Drive between 2nd Street and Herondo Street to make it two-way and direct all truck traffic along Herondo Street to approach the project site from the south.	Review of design documents and site inspections	Prior to pipeline construction activities	City of Hermosa Beach

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
TR-2a	Pipeline construction activities within the Pipeline right-of-way shall be limited to weekday between the hours of 9:00 a.m. and 3:00 p.m., unless the applicable municipality approves a specific exception to the time limit for periods of limited duration, subject to measures required by the municipality to protect the public health and safety. The Applicant shall coordinate with adjacent jurisdictions throughout the design and construction phase.	Review of design documents and site inspections	Prior to pipeline construction activities	Cities of Hermosa Beach, Redondo Beach, and Torrance
TR-2b	The applicant shall implement a Construction Traffic Management Plan (CTMP) during Pipeline construction that includes the following pursuant to the procedures and subject to approval of the applicable municipality: 1) Require the Pipeline contractor(s) to obtain and follow street construction permits in the affected areas (Cities of Hermosa Beach, Redondo Beach, and Torrance, and Caltrans facilities - PCH and Hawthorne Boulevard); 2) Develop detour and traffic management plans consistent with the affected City's standard roadway plans (e.g., Torrance Street Standard T603), the California Manual of Uniform Traffic Control Devices (MUTCD), or the Work Area Traffic Control Handbook (WATCH); 3) Revise Pipeline construction schedules to minimize access impacts to adjacent residents and businesses; and 4) Ensure that all affected residences and business have adequate emergency access during all times and phases of construction. The Applicant shall coordinate with adjacent jurisdictions throughout the design and construction phase.	Approval of CTMP	Prior to pipeline construction activities	Cities of Hermosa Beach, Redondo Beach, and Torrance
TR-3a	The applicant shall be prohibited from routing Proposed Oil Project-related heavy truck exceeding 20,000 pounds on 190 th Street between Anza Avenue and PCH, except during Pipeline construction. The Applicant shall comply with all requirements of the applicable city.	Use of alternative route	Phases 1-4	Cities of Hermosa Beach, Redondo Beach, and Torrance
TR-3b	The applicant shall route inbound and outbound heavy (>20,000 pounds) truck traffic along PCH and Artesia Boulevard, which are designated truck routes.	Use of alternative route	Phases 1-4	Cities of Hermosa Beach, Redondo Beach, and Torrance

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
TR-3c	Applicant shall supply private parking sufficient to meet all parking demands and shall direct all employees and contractors to park within Applicant's private parking areas, or to utilize an alternative parking program approved by the City.	Review of Plans and onsite inspections	Phase 1-4	City of Hermosa Beach
TR-4a	The City shall design the permanent Proposed City Maintenance Yard so that it does not enter/exit directly onto Valley Drive.	Review of Plans	Phase 3	City of Hermosa Beach
TR-4b	If the permanent Proposed City Maintenance Yard Project affects the sidewalk, then the design shall incorporate a sidewalk design along Valley Drive which utilizes a landscape buffer to separate the pedestrians from the street.	Review of Plans	Phase 3	City of Hermosa Beach

Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
TR-4a	The City shall design the permanent Proposed City Maintenance Yard so that it does not enter/exit directly onto Valley Drive.	Review of Plans	Phase 3	City of Hermosa Beach
TR-4b	If the permanent Proposed City Maintenance Yard Project affects the sidewalk, then the design shall incorporate a sidewalk design along Valley Drive which utilizes a landscape buffer to separate the pedestrians from the street.	Review of Plans	Phase 3	City of Hermosa Beach

Table 8-11 Water Resources

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
WR-1	<p>Prior to approval of demolition and new construction, a Registered Civil Engineer in the State of California shall evaluate the capacity of the existing sewer line system, beginning at the proposed tie-ins on Valley Drive for the Proposed City Maintenance Yard Project and 6th Street for the Proposed Oil Project, and continuing downstream to the Sanitation Districts of Los Angeles County sewer system, prior to any connections. A 7-day capacity performance test shall be performed, based on Sanitation Districts of Los Angeles County average wastewater generation factors, to determine baseline and peak flows, and to ensure the sewer has adequate capacity in the downstream areas. The capacity analysis shall be submitted to the City Public Works Department and the Districts for review and approval.</p> <p>In the event that existing sanitary sewer facilities are insufficient to accommodate increased flows from the Project Site, the Applicant shall provide mobile sanitary facilities (i.e., toilet, sink, and urinal) for onsite personnel, as necessary.</p>	Area study of the proposed sewer line and a 7-day performance capacity test should be performed at select downstream locations to verify the adequacy of the existing sewer.	Prior to issuance of permit	City of Hermosa Beach
WR-2	Implement MM HWQ-2a through HWQ-2d.	See HWQ-2a through HWQ-2d	See HWQ-2a through HWQ-2d	See HWQ-2a through HWQ-2d
WR-3a	<p>The Applicant shall complete a site-specific Area of Review/Zone of Endangering Influence analysis, per Division of Oil, Gas, and Geothermal Resources requirements, to determine if oil and gas wells are present that might serve as conduits for injected liquids to migrate upward to underground sources of drinking water. In the event that such wells are present, those wells shall be plugged and abandoned such that underground sources of drinking water (i.e., less than 10,000 mg/L total dissolved solids) are protected. Plugging and abandonment of those wells shall include zonal isolation plugs outside all casings and shall be completed per current Division of Oil, Gas, and Geothermal Resources standards.</p>	Coordination with Division of Oil, Gas, and Geothermal Resources	Prior to initiation of injection operations	City of Hermosa Beach and Division of Oil, Gas, and Geothermal Resources
WR-3b	<p>The Applicant shall confine injected fluids into the intended zone of injection in order to adequately protect underground sources of drinking water. Injection well cement shall be placed at the base of all underground sources of drinking water, and not just at the base of fresh water, to protect water with total dissolved solids content ranging from 3,000 mg/L to 10,000 mg/L.</p>	Coordination with Division of Oil, Gas, and Geothermal Resources	During injection well drilling and injection operations	City of Hermosa Beach and Division of Oil, Gas, and Geothermal Resources

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed Oil Project and Pipeline Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
WR-3c	The Applicant shall complete step-rate tests, using bottom-hole and surface pressure gauges, such that maximum allowable surface injection pressures are set at a maximum of 95 percent of the fracture pressure of the formation being injected.	Coordination with Division of Oil, Gas, and Geothermal Resources	Prior to injection operations	City of Hermosa Beach and Division of Oil, Gas, and Geothermal Resources
WR-3d	The Applicant shall ensure that the hydrostatic pressure in overlying West Coast Basin aquifers is not exceeded during injection over the active life of the disposal wells. To ensure that this does not occur, the static reservoir pressure shall be monitored on a periodic basis, per Division of Oil, Gas, and Geothermal Resources requirements, and injection into the receiving zone shall cease if and when the hydrostatic pressure is exceeded.	Coordination with Division of Oil, Gas, and Geothermal Resources	Prior to injection operations	City of Hermosa Beach and Division of Oil, Gas, and Geothermal Resources
WR-3e	The Applicant shall meet with Division of Oil, Gas, and Geothermal Resources staff annually to review the status of the waste water injection wells. Any deficiencies identified by Division of Oil, Gas, and Geothermal Resources staff shall be immediately rectified by the Applicant.	Coordination with Division of Oil, Gas, and Geothermal Resources	Annually following initiation of Phase 2	City of Hermosa Beach and Division of Oil, Gas, and Geothermal Resources

Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
WR-1	Prior to approval of demolition and new construction, a Registered Civil Engineer in the State of California shall evaluate the capacity of the existing sewer line system, beginning at the proposed tie-ins on Valley Drive for the Proposed City Maintenance Yard Project and 6th Street for the Proposed Oil Project, and continuing downstream to the Sanitation Districts of Los Angeles County sewer system, prior to any connections. A 7-day capacity performance test shall be performed, based on Sanitation Districts of Los Angeles County	Area study of the proposed sewer line and a 7-day performance capacity test should be	Prior to issuance of permit	City of Hermosa Beach

Section 8: Summary of Mitigation Measures and Mitigation Monitoring Plan

Proposed City Maintenance Yard Project Mitigation Measures				
Mitigation Measure	Requirements	Compliance Verification		
		Method	Timing	Responsible Party
	<p>average wastewater generation factors, to determine baseline and peak flows, and to ensure the sewer has adequate capacity in the downstream areas. The capacity analysis shall be submitted to the City Public Works Department and the Districts for review and approval.</p> <p>In the event that existing sanitary sewer facilities are insufficient to accommodate increased flows from the Project Site, the Applicant shall provide mobile sanitary facilities (i.e., toilet, sink, and urinal) for onsite personnel, as necessary. In the event that existing sanitary sewer facilities are insufficient to accommodate increased flows from the Proposed City Maintenance Yard Project, sewer upgrades shall be completed to accommodate the increased flows.</p>	<p>performed at select downstream locations to verify the adequacy of the existing sewer.</p>		