

SECTION 6.0 CEQA MANDATED SECTIONS

6.1 SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

Pursuant to Section 15126.2(a) of the California Environmental Quality Act (CEQA) Guidelines, this Draft Environmental Impact Report (EIR) must identify the significant environmental effects of the Inglewood Oil Field Specific Plan Project (Project). The Project's potentially significant environmental impacts are summarized below and discussed in detail in Section 4.0 of this Draft EIR. The analyses in Sections 4.1 through 4.15 of this Draft EIR indicate the Project would require mitigation measures for the following environmental topics, including:

Section 4.2: Air Quality

Section 4.3: Biological Resources

Section 4.5: Geology, Soils, and Seismicity

Section 4.6: Greenhouse Gas Emissions

Section 4.7: Hazards, Hazardous Materials, and Risk of Upset

Section 4.8: Hydrology and Water Quality

Section 4.11: Noise

Section 4.15: Utilities

As discussed in **Section 4.2, Air Quality**, implementation of the Maximum Buildout Scenario would result in volatile organic compounds (VOCs), nitrous oxides (NOx), and carbon monoxide (CO) emissions that would exceed the South Coast Air Quality Management District (SCAQMD) significance thresholds. With implementation of MM AQ-1, which would require CARB/EPA Tier 4 certified engines and diesel catalysts capable of achieving 90 percent reductions for hydrocarbons and for respirable particulate matter with a diameter of less than 10 microns (PM10), MM AQ-2, which prohibits the conduct of well drilling and well stimulation activities concurrently, and MM AQ-3, which requires the Oil Field Operator to demonstrate that the activities included in the Annual Drilling Plan will be conducted in compliance with performance standards that correspond to the SCAQMD's operational thresholds of significance, the proposed Project would result in less than significant direct and cumulative impacts for the peak day.

The Project, under the Maximum Buildout Scenario, would exceed the health risk criteria for residential cancer risk at the nearest residential receptor due to emissions of toxic air contaminants (TAC). The primary driver of the cancer risk is emissions of diesel particulate matter (DPM); the major DPM source is well drilling. With implementation of MM AQ-3, which would allow the Oil Field Operator to operate natural gas or propane-fired engines to power generators in place of diesel-fueled engines, thereby lowering DPM emissions and the associated risk. With incorporation of MM AQ-1 and MM AQ-3, impacts related to health risk impacts (cancer risk) at the nearest residential receptor would be less than significant.

Significant Unavoidable Impact AQ-1: With implementation of MM AQ-1, MM AQ-2, and MM AQ-3, the Maximum Buildout Scenario could generate localized emissions of NOx, PM10 and PM2.5 at levels that exceed the operational localized significance threshold. While MM AQ-3 requires that additional emissions reductions be implemented to reduce Project impacts, MM AQ-3 does not specifically require that the Oil Field Operator reduce emissions locally through the use of electric engines. Additionally, the use of regional offsets (see Option 2) or offsets within the larger County IOF (see Option 3) were determined to be ineffective at reducing localized impacts at a specific sensitive receptor site. Therefore, even with MM AQ-3, the Project

could result in significant and unavoidable direct and cumulative impacts for localized NOx, PM10, and PM2.5 emissions at some potential well locations where sensitive receptors are close enough to be affected.

As discussed in **Section 4.3, Biological Resources**, Project implementation may result in significant impacts to roosting bats and to special status vegetation types. MM BIO-1 requires that a qualified Biologist conduct a pre-construction bat habitat assessment prior to any disturbance of a tree or structure, and if a potential colonial roosting is determined a focused survey would be conducted. Avoidance and exclusionary measures would be implemented as described to avoid potentially significant impacts to bats to less than significant. MM BIO-2 further defines the requirements of the Habitat Restoration Plan (HRP) component of the Special Status Species and Habitat Protection Plan required in Section 29 of the Specific Plan, which would reduce potentially significant impacts to special status vegetation to less than significant. With incorporation of the Specific Plan requirements and MM BIO-1 and MM BIO-2, direct, indirect, and cumulative impacts to biological resources would be reduced to levels less than significant.

As discussed in **Section 4.5, Geology, Soils, and Seismicity**, hydraulic fracturing has been proven to directly induce earthquakes. In the last decade, a number of examples of earthquake activity related to oil and gas production (i.e., well stimulation) as well as injection of fluids (e.g., wastewater disposal) have been observed. MM GEO-1 requires the development of a “traffic light” system for screening of seismic activity in the City IOF. The “traffic light” system is a risk-based mitigation plan that allows for a response if induced seismicity is detected relating to injection-induced seismicity. In addition to MM GEO-1, DOGGR will be implementing SB4 GEO-1a, SB4 GEO-1b, and SB4 GEO-1e as State regulations (interim MMs GEO-3 through GEO-5). The DOGGR’s SB4 GEO-1a, which corresponds to interim MM GEO-3, requires that, as part of the application for a well stimulation treatment permit, the Oil Field Operator demonstrate to the DOGGR’s satisfaction that the location and trend of the proposed well will not be within or enter into an active earthquake fault, unless it can be shown that established or proposed well control and well shut-in procedures adequately address the seismic consequences. Similar to interim MM GEO-3, the DOGGR’s SB4 GEO-1b, which corresponds to interim MM GEO-4, prohibits the Oil Field Operator from conducting well stimulation treatments within an appropriate setback of a known active fault unless procedures, as per interim MM GEO-3, adequately address the seismic consequences. The DOGGR’s SB4 GEO-1e, which corresponds to interim MM GEO-5, requires that the Oil Field Operator demonstrate to the DOGGR’s satisfaction that the spill contingency plan required by Section 1722.9 of Title 14 of the California Code of Regulations adequately addresses the consequences of an earthquake occurring during the well stimulation process.

Significant Unavoidable Impact GEO-1: Even with implementation of MM GEO-1, which requires implementation of an Induced Seismicity Avoidance, Monitoring, Evaluation, and Mitigation Protocol (e.g. traffic-light system); MM GEO-2, which prohibits deep well wastewater disposal in the City IOF unless otherwise approved by the City; interim MMs GEO-3 and MM GEO-4, which address seismicity, fault rupture, and groundshaking hazards from well stimulation activities; and interim MM GEO-5, which addresses post-earthquake response requirements are part of the spill contingency plan for well stimulation treatments, the potential for well stimulation treatments to result in induced seismicity cannot definitively be reduced to a level less than significant. As such, the Project could result in both direct and cumulative significant and unavoidable impacts for induced seismicity, rupture of a known earthquake fault, and for strong seismic ground shaking, also resulting in significant and unavoidable direct and cumulative impacts related to accident conditions associated with induced seismicity.

With implementation of MM GEO-2, induced seismicity hazards associated with deep well injection of wastewater would be eliminated because MM GEO-2 would prohibit such activities

until/unless proven to be safe. Therefore, with implementation of MM GEO-2, the proposed Project would not contribute to cumulatively significant impacts due to induced seismicity from deep well injection of wastewater. However, induced seismicity hazards due to activities that may occur within the County IOF, even if prohibited within the City IOF, would have an effect on the Project Site and vicinity.

As discussed in **Section 4.6, Greenhouse Gas Emissions**, Project's construction and operational GHG emissions of 7,081 MTCO₂e/year, would result in a less than significant direct impact because emissions would not exceed the SCAQMD recommended significance threshold of 10,000 MTCO₂e/year for industrial projects. Implementation of AB 32 control measures for reduced vehicle emissions would decrease GHG emissions from the proposed Project. Similarly, measures requiring utilities to increase renewable energy sources are not implemented by the proposed Project, and the Project would not conflict with implementation; however, the Project would consume electricity for the operation of the wells. Therefore, Project-related GHG emissions would be reduced as utilities purchase electrical power generated from sources with lower GHG emissions. Implementation of the steps to prevent methane loss would be conducted in compliance with the proposed CARB requirements in *Regulation Order Subarticle 13: Greenhouse Gas Emission Standards for Crude Oil and Natural Gas Facilities* § 95665. MM GHG-1 requires that the Oil Field Operator demonstrate to the City of Culver City a plan for the implementation of reduced emissions completions ("green" completions) or completion combustion devices, during oil and gas well completions. MM GHG-2 requires that the Oil Field Operator demonstrate to the City of Culver City a plan for the implementation of "Gold-level" protocols established by the EPA Natural Gas STAR Program to recover for reuse or destroy CH₄ in associated gas and casinghead gas. MM GHG-3 requires that the Oil Field Operator demonstrate to the City of Culver City a plan for the implementation of the following emission control strategies defined by UNFCCC "Approved Methodologies" for projects in the Clean Development Mechanism program. MM GHG-4 requires that the Oil Field Operator demonstrate to the City of Culver City a plan for the installation of methane and carbon dioxide sensors at existing wells and new wells within the radius of influence of a planned well stimulation in order to monitor possible leaks or venting of methane gas. With implementation of MM GHG-1 through MM GHG-4, impacts would be less than significant.

As discussed in **Section 4.7, Hazards, Hazardous Materials, and Risk of Upset**, Project implementation may result in significant impacts associated with potential spills, leaks, and pipeline ruptures; exposure to silica; risk of upset events, including tank rupture oil fires and methane gas migration; and induced seismicity from well stimulation activities.

MM HAZ-1 requires the Oil Field Operator to implement an Inventory Reduction Plan. MM HAZ-2 requires the Oil Field Operator to conduct a Facility Siting Study or Quantitative Risk Assessment. MM HAZ-3 requires the Oil Field Operator to conduct a Process Hazard Analysis (PHA) followed by a Layer of Protection Analysis (LOPA). MM HAZ-4 requires the Oil Field Operator to prepare, for City and DOGGR review and approval, an Operating Procedures Plan. MM HAZ-5 requires the Oil Field Operator to evaluate the need for flame arrestors on the tank vents. In addition to MM HAZ-1 through MM HAZ-5, DOGGR will be implementing SB4 HAZ-1a as State regulation (interim MM HAZ-14). This measure requires that the Oil Field Operator must demonstrate to the satisfaction of DOGGR that the Spill Contingency Plan required by Section 1722.9 of Title 14 of the California Code of Regulations is sufficient to prevent any leaks, spills or other discharges of well stimulation fluids, flowback fluids, produced water, hazardous chemicals, contaminated surface water runoff, oil, or other potentially dangerous materials that might occur before, during, and after the well stimulation process from reaching the soil at all site pads. MM HAZ-6 requires the Oil Field Operator to prepare, for review and approval by the City and DOGGR, and implement a Control of Ignition Sources Plan. MM HAZ-7 requires the Oil Field Operator to notify the City

and DOGGR in writing about the anticipated proppants(s) to be used. MM HAZ-8 requires the Fugitive Dust Control Plan prepared in accordance with Section 21 of the Specific Plan to incorporate safety measures addressing well stimulation activities. MM HAZ-9 requires the Oil Field Operator to conduct an annual inventory of the oil field equipment, well stimulation equipment and supporting infrastructure, and well stimulation fluids with hazardous materials, and provide the report to the City and DOGGR for review and approval. MM HAZ-10 requires the Oil Field Operator to establish a Mechanical Integrity Testing and Maintenance Program for all equipment used in all well stimulation treatments. In addition to the SB4 EIR measures, MMs HAZ-11 through HAZ-13 provides the required actions if any stained, discolored, or odorous soils are encountered; require either location of future storage tanks at least 907 feet from developed area or at least 655 feet if reducing the size of the diked area to 15,228 square feet or alternately conducting a Facility Siting Study or Quantitative Risk Assessment; and testing of local soils to determine soil methane levels and periodically monitoring, as needed but no less than one time per year, respectively. The results of the Risk of Upset analysis do not depend on the cause of the upset type and conditions (e.g., whether caused by an induced earthquake, or a tectonic earthquake), the upset conditions are addressed through the mitigation measures. As discussed in Section 4.5, Geology, Soils, and Seismicity, MM GEO-1 requires the development of a “traffic light” system for screening of seismic activity in the City IOF. MM GEO-2 would prohibit the practice of deep well injection for wastewater disposal within the City IOF until such time that it could be proven that a site-specific mitigation system (e.g., traffic light) is effective at avoiding large seismic events associated with deep well injection for wastewater disposal.

With implementation of MM HAZ-1 through MM HAZ-14, and MM GEO-1 and MM GEO-2, potential direct and cumulative impacts related to hazards, hazardous materials, and risk of upset would be less than significant, with the exception potential accident conditions associated with induced seismicity from well stimulation treatments (see **Significant Unavoidable Impact GEO-1** above).

As discussed in **Section 4.8, Hydrology and Water Quality**, Project implementation has the potential to result in significant impacts to surface water and groundwater quality due to accidental spills or releases of materials that could pollute surface waters or subsurface releases due to well casing failure or other accidental conditions. MM HYD-1 requires the Oil Field Operator to implement a closed-loop drilling and containment system to avoid spillage of drilling muds and fluids. MM HYD-2 requires the Oil Field Operator to prepare and implement a Project-specific Groundwater Monitoring Plan; the plan must be prepared and certified by a licensed groundwater and surface hydrologist. MMs HYD-3 through HYD-6 require monitoring of DOGGR-selected wells within the Axial Dimensional Stimulation Area (ADSA); installation of a methane sensor; demonstration of a record review and, if warranted, a surface geophysical survey or other suitable field methods to locate any improperly abandoned wells within the ADSA of the well to be stimulated; and provision of a tracer or some other reasonable method to allow well stimulation fluids to be distinguished from other fluids or chemicals prior to the commencement of any well stimulation activities, respectively. Additionally, the DOGGR determined that several of the mitigation measures developed in the SB4 EIR will be converted into formal (State) regulations.

Specifically, the DOGGR’s SB4 GW-4b, which corresponds to interim MM HYD-7, requires that the Oil Field Operator demonstrate to the DOGGR’s satisfaction that a well used for well stimulation treatments contains an annular 500-foot cement seal extending across the base of protected groundwater and that the integrity of the seal will prevent unintended migration of fluid. The DOGGR’s SB4 GW-1b, which corresponds to interim MM HYD-8, requires that prior to issuance of a well stimulation permit, the Oil Field Operator will provide DOGGR with (a) water body name, if applicable; (b) characteristics (e.g., stream, pond, lake, wetland); (c) whether the water body is perennial, intermittent or ephemeral; (d) normal summer and winter flow rate, if

available, or estimated; (e) habitat characteristics; (f) distance and ground slope between the well pad and water body; (g) contributing watershed area; and (h) expected drainage patterns at the location of the proposed well stimulation treatment. The DOGGR will consider this information in determining whether to approve the proposed well stimulation treatment permit, and will require that protection and minimization of potential impacts to identified surface water be addressed in the site layout design, Storm Water Pollution Prevention Plan, worker training, spill contingency and response plans, and site restoration plans. With the implementation of MM HYD-1 through MM HYD-8, direct impacts and cumulative impacts associated with hydrology and water quality would be less than significant.

As discussed in **Section 4.11, Noise**, operational noise at full buildout of the Specific Plan is less than significant. Short-term construction-related daytime noise is less than significant with the incorporation of MM NOI-1 and MM NOI-2. MM NOI-1 requires the Oil Field Operator to implement noise-abatement measures as deemed appropriate on a case-by-case basis based on the site-specific factors at the site of activity commencement of well rework, well stimulation activities, or well pad grading work. One option would be to install temporary 20-foot-high noise barriers adjacent to the work site facing sensitive receptors, pursuant to the performance standards described in MM NOI-1. Alternatively, the Oil Field Operator may demonstrate by noise analysis that alternate noise abatement measures other than 20-foot-high barriers would limit the activity-generated noise level increase at sensitive receptors, considering concurrent activities when applicable, to 5 dBA Leq or less, and that the noise level at sensitive receptors would not exceed 65 dBA Community Noise Equivalent Level (CNEL). MM NOI-2 requires that the Oil Field operator demonstrate by noise analysis that the proposed noise abatement, would limit nighttime noise level increases at sensitive receptors to three dBA or less, and that if these noise levels are not achievable, the Oil Field Operator demonstrate to the satisfaction of the Community Development Director that the maximum reasonable and feasible noise abatement measures shall be used for the drilling operation. MM NOI-3 requires that all property owners and occupants within 500 feet of the event activity be notified of pending work, at least 30 days but no more than 45 days prior to the start of well drilling, well redrilling, well rework, or well stimulation activities.

Significant Unavoidable Impact NOI-1: Because noise reductions from the Specific Plan's Quiet Mode Drilling Plan requirement cannot be reasonably quantified, and because MM NOI-2 and MM NOI-3 would not adequately reduce new well drilling noise during nighttime hours at the closest sensitive receptor, direct impacts and cumulative impacts from 24-hour well drilling noise could be significant and unavoidable for some potential well locations located in proximity to residences.

As discussed in **Section 4.15, Utilities**, cumulative water demands for new active wells (for both the City IOF and County IOF) would be less than significant. However, future well stimulation activities are unknown at this time; as such, the volume of water required to conduct well stimulation activities at the Inglewood Oil Field is unknown. DOGGR's Draft Mitigation Policy Manual includes mitigation measures pursuant to the SB4 EIR that are applicable to the analysis of cumulative water supplies for well stimulation activities. Specifically, MM UTIL-1 (see SB4 SWR-3a) requires written assurance of sufficient water supplies from the supplier prior to the commencement of a well stimulation treatment; and interim MM UTIL-2, which implements SB4 GW-1a to be implemented and enforced by the City In addition to MM GEO-1, DOGGR will be implementing SB4 GW-1a as State regulation (interim MM UTIL-2). MM UTIL-2 requires an applicant for a well stimulation permit to conduct a feasibility study to determine if recycled water or alternative water sources (including produced water, flowback water, or saline groundwater) may effectively be used for well stimulation. With implementation of MM UTIL-1 and interim MM UTIL-2, cumulative impacts to water supplies associated with well stimulation activities throughout the Inglewood Oil Field would be less than significant.

6.2 **SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED**

Pursuant to Section 15126.2(b) of the State CEQA Guidelines, this Draft EIR considers the significant environmental effects that cannot be avoided if the Project is implemented. Through the analysis contained in Section 4.0 of this Draft EIR, the environmental factors that were found to have significant and unavoidable impacts with incorporation of mitigation include the following:

- **Section 4.2, Localized Air Quality**

Significant Unavoidable Impact AQ-1: With implementation of MM AQ-1, MM AQ-2, and MM AQ-3, the Maximum Buildout Scenario could generate localized emissions of NOx, PM10 and PM2.5 at levels that exceed the operational localized significance threshold. While MM AQ-3 requires that additional emissions reductions be implemented to reduce Project impacts, MM AQ-3 does not specifically require that the Oil Field Operator reduce emissions locally through the use of electric engines. Additionally, the use of regional offsets (see Option 2) or offsets within the larger County IOF (see Option 3) were determined to be ineffective at reducing localized impacts at a specific sensitive receptor site. Therefore, even with MM AQ-3, the Project could result in significant and unavoidable direct and cumulative impacts for localized NOx, PM10, and PM2.5 emissions at some potential well locations where sensitive receptors are close enough to be affected.

- **Section 4.5, Geology, Soils and Seismicity**

Significant Unavoidable Impact GEO-1: Even with implementation of MM GEO-1, which requires implementation of an Induced Seismicity Avoidance, Monitoring, Evaluation, and Mitigation Protocol (e.g. traffic-light system); MM GEO-2, which prohibits deep well wastewater disposal in the City IOF unless otherwise approved by the City; interim MMs GEO-3 and MM GEO-4, which address seismicity, fault rupture, and groundshaking hazards from well stimulation activities; and interim MM GEO-5, which addresses post-earthquake response requirements are part of the spill contingency plan for well stimulation treatments, the potential for well stimulation treatments to result in induced seismicity cannot definitively be reduced to a level less than significant. As such, the Project could result in both direct and cumulative significant and unavoidable impacts for induced seismicity, rupture of a known earthquake fault, and for strong seismic groundshaking, also resulting in significant and unavoidable direct and cumulative impacts related to accident conditions associated with induced seismicity.

- **Section 4.10, Noise**

Significant Unavoidable Impact NOI-1: Because noise reductions from the Specific Plan's Quiet Mode Drilling Plan requirement cannot be reasonably quantified, and because MM NOI-2 and MM NOI-3 would not adequately reduce new well drilling noise during nighttime hours at the closest sensitive receptor, direct impacts and cumulative impacts from 24-hour well drilling noise could be significant and unavoidable for some potential well locations located in proximity to residences.

As stated in Section 15093 of the State CEQA Guidelines, when a Lead Agency approves a project which would result in significant effects that are not avoided or substantially lessened by feasible mitigation measures, the Lead Agency shall state in writing the specific reasons to support its action despite these effects based on substantial evidence in the record. This document is called a Statement of Overriding Considerations and shall be required for the

significant and unavoidable impacts identified above as part of the Lead Agency's decision-making process.

6.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE CAUSED BY THE PROPOSED PROJECT SHOULD IT BE IMPLEMENTED

Section 15126.2(c) of the State CEQA Guidelines states that significant irreversible environmental changes, which would be caused by a project, may include:

- Uses of nonrenewable resources that may be irreversible if a large commitment of such resources makes removal or nonuse thereafter unlikely;
- Primary impacts and, particularly, secondary impacts that generally commit future generations to similar uses;
- Irreversible damage from environmental accidents associated with the project; and,
- Irretrievable commitments of resources that are not justified.

The approval and adoption of the proposed Inglewood Oil Field Specific Plan would not, in itself, result in any physical or irreversible impacts on the environment. However, the Oil Field Operator would have to conduct all future oil field activities within the City portion of the Inglewood Oil Field (City IOF) in accordance with the regulations and standards of the Specific Plan. These activities would result in indirect but irreversible environmental changes, as discussed further below.

The Project would result in the continued commitment of land in the City of Culver City for oil and gas extraction and related oil field operations, including the continued use of, and likely increase in the number of: well pads, oil and gas wells, pumps, equipment, injection wells, storage tanks, access roads, pipelines and other associated facilities. Since the Project Site has been in use as an active oil field for many years, its continued use as an oil field is not considered a significant commitment of land resources.

During intermittent well drilling, redrilling, rework, and well stimulation activities, a commitment and use of nonrenewable and slowly renewable resources, including water (for well drilling, mixing mud, mixing cement, well stimulation, cleaning); petroleum fuels and natural gas (for vehicle, drill rigs, and equipment use); lumber, sand/gravel, cement, and metals (for use in the construction or reconstruction of wells, tanks, pipelines, signs, lights, and other facilities and for well plugging); and electricity (for equipment use and lighting) would occur. In addition, various drilling fluids and chemicals are also used for well drilling, rework, and well stimulation activities. This use of nonrenewable and slowly renewable resources would not be a permanent activity, but would be incremental over the remaining years of City IOF operation and would be limited to the applicable constraints set forth in the Specific Plan. While well construction materials and equipment may not be easily recycled at the end of well drilling, rework, and well stimulation activities, this commitment of resources would not be considered significant due to the limited amount of resources needed and the eventual termination of oil and gas production activities in the City IOF.

Over the long term, oil field operations would also require the continued use of water, petroleum fuels (e.g., gasoline, diesel), and electricity. Other resources that are slow to renew and/or recover from environmental stressors would also be impacted by implementation of the Specific Plan (e.g., air quality through the combustion of fossil fuels and the production of greenhouse gases and water supply through the increased potable water demands for well operations and maintenance). Section 4.2, Air Quality, Section 4.6, Greenhouse Gases, and Section 4.14, Utilities, respectively, discuss these impacts in greater detail. In addition, oil and gas extraction activities carry the potential for environmental accidents and hazards such as spills, fire, explosion, soil and water

contamination, as discussed in Section 4.7, Hazards, Hazardous Materials, Risk of Upset, and Section 4.8, Hydrology and Water Quality. The potential for irreversible environmental damage associated with these hazards would remain for the duration of oil and gas extraction and production activities at the Project Site.

The primary irreversible environmental change that would occur with the Project is extraction/production of oil and gas resources from the City IOF. It is anticipated that oil and gas drilling activities would continue to occur over the long-term until these resources are depleted or extraction becomes economically infeasible, or the Inglewood Oil Field is abandoned and decommissioned. Thus, the irreversible change associated with the extraction/production of oil and gas resources in the City IOF would occur with the Project, and would occur without the Project (in the absence of the Specific Plan), and can only be halted if the Oil Field Operator discontinues drilling and production operations, whether initiated by the City or the Oil Field Operator. Recovered oil and gas resources from the City IOF would be used to meet some of the existing and future energy demands in California. As previously discussed, the City IOF contains only 77.8-acres out of the approximately 1,000-acre Inglewood Oil Field, and the production volume from the City IOF would not represent a major portion of the demand in Southern California. The Project would also not directly encourage greater oil and gas consumption, but would potentially allow for decreased reliance on foreign and out-of-State resources.

In 2012, President Barack Obama, in an effort to increase energy independence for the purposes of national security and economic development, established a national goal to reduce oil imports by one half by the year 2020. One method of decreasing reliance upon oil imports, in addition to developing substitutes for oil and increasing energy efficiency, is to increase the production of domestic oil (White House 2013). The Project is consistent with this goal.

The Project would allow for the continuation of oil and gas extraction activities at the City IOF, with the main purpose of the proposed Specific Plan to provide greater regulation of oil field activities in order to protect adjacent land uses from the environmental impacts of these activities and reduce adverse effects. As discussed in Section 6.1 above, the Project would result in significant and unavoidable impacts related to air quality; geology, soils, and seismicity; and noise, which would also represent significant irreversible changes of Project implementation.

6.4 GROWTH-INDUCING IMPACTS

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the Project could foster economic or population growth or the construction of additional development, either directly or indirectly, in the surrounding environment.

“Direct growth” would be induced by the creation of the facilities within the Project boundaries, as well as off-site Project components, which would directly accommodate a new population in the region (e.g., new housing units) or provide employment opportunities that require a new population to locate into the region (e.g., new employment center).

“Indirect growth” would be attributable to and stimulated by a project’s construction and/or operation. Indirect growth would be induced by either removing obstacles to population growth (e.g., expanding infrastructure such as utilities and roadways; expanding public services; changes in existing regulations pertaining to land development); and/or stimulating economic activity that attracts a new population. The State CEQA Guidelines state that growth-inducing effects are not necessarily beneficial, detrimental, or of little significance to the environment. If a project is

determined to be growth-inducing, then it must be determined if the induced growth would result in significant environmental impacts.

Direct and/or indirect growth could occur if the Project would foster economic growth for the surrounding community that could encourage additional development, population growth, or the construction of additional housing. Included in this are projects that would remove obstacles to population growth, or projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. In order to determine whether the Project would be growth-inducing, the following four questions must be addressed. The analysis below provides information on whether the Project could be directly or indirectly growth-inducing, and if found to be growth-inducing, whether the growth could contribute to significant changes to the environment beyond the direct consequences associated with the Project as presented in Section 4.0 of this Draft EIR.

1. Would the Project foster economic growth/employment opportunities that could encourage and facilitate other activities that could significantly affect the environment?

Economic growth/employment opportunities could significantly affect the environment if they encouraged a new population of workers/families to relocate to the project or surrounding areas such that new construction or demands on public services and/or facilities would result. The Project would require workers for various activities, including management of the oil and gas operations on the Project Site as well as to perform drilling, construction, well stimulation, maintenance tasks, and other activities on the City IOF. However, future employment opportunities may not be specific to activities within the City IOF, but would be subject to the employment decisions of Oil Field Operator, which operates the entire Inglewood Oil Field. Future employment opportunities within the Oil Field may require additional employees, as discussed in the CSD EIR, but this potential expansion of employment opportunities are not anticipated to require a new population of workers to relocate to the region or substantively affect housing or public services.

Southern California has a highly skilled labor pool and has many active productive oil fields that support the local industrial sector. If additional skilled labor was required for Project implementation, it is not anticipated that the Oil Field Operator would need to look outside of the southern California labor market.

With an estimated unemployment rate of 3.8 percent in the City and 5.2 percent in the County as of July 2017, new on-site jobs may be filled by the available unemployed local labor force in the City of Culver City and from other areas in Los Angeles County (EDD 2017). If employees were required to relocate from Kern County or other oil-producing areas in California that contain a skilled labor force, there was a vacancy rate of 3.3 percent within the City as of January 2017 (DOF 2017).

The addition of new worker households would not substantially affect the availability of housing in the City of Culver City or necessitate construction of new housing. Additionally, economic growth due to revenues generated for the Oil Field Operator and the leaseholders of the properties within the City IOF are not anticipated to result in new construction or demands on public services and/or facilities that could significantly affect the environment.

2. Would the Project foster population growth or the construction of additional housing that may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects?

As discussed in Section 3.0, Project Description, the Project would update procedures, development and implementation standards, and conditions for future oil and gas exploration, development, and production activities within the City IOF. The Project would not directly or indirectly create new housing units and, as discussed above, and would not induce a new residential population into the region that could result in new construction or demands on public services and/or facilities that could significantly affect the environment.

3. Would the Project remove obstacles to population growth?

As discussed in Section 3.0, Project Description, the Project would update procedures, development and implementation standards, and conditions for future oil and gas exploration, development, and production activities within the City IOF. No new land uses would be introduced on the Project Site. No new growth in the surrounding area is anticipated with the Project. There would be no expansion of public facilities, roadways, or infrastructure capacity, including water, wastewater, electrical, and oil and gas infrastructure, beyond what would be required serve the Project. There would be no expansion of public services or facilities.

The Project does not require a General Plan Amendment (associated with a change to the current land use designation) or zone change. While the Project would require an adoption of Culver City Zoning Code, this amendment would (1) amend Zoning Code Section 17.610.010.D to specify that the Specific Plan regulations will apply to oil and gas production uses in the Oil Field; and (2) add a new section to Article 4 to reference the Specific Plan, which would establish the standards for oil and gas production within the Specific Plan Area, it would not change land uses. The existing "Open Space" and "Industrial" land use designation and the existing R1 (Residential Single Family); OS (Open Space) and IG (Industrial General) zoning of the Project Site would remain in place, as oil and gas production is allowed in the City IOF as a continuing nonconforming use per Zoning Code Section 17.610.010.D.

6.5 APPENDIX F – ENERGY IMPACTS

Section 21100(b)(3) of California Environmental Quality Act (CEQA) requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing any inefficient, wasteful, and unnecessary consumption of energy. The Environmental Checklist in Appendix G of the State CEQA Guidelines does not contain specific thresholds for energy use or energy efficiency. However, Appendix F of the State CEQA Guidelines states that the means to achieve the goal of conserving energy imply the wise and efficient use of energy and include (1) decreasing overall per capita energy consumption; (2) decreasing reliance on fossil fuels such as coal, natural gas and oil; and (3) increasing reliance on renewable energy sources. It outlines EIR contents that can be used for analyzing the significant energy implications of a project, including topics to include in the project description, environmental setting, environmental impacts, mitigation measures, alternatives, and other issues related to energy. In accordance with Appendix F, titled "Energy Conservation", a project's impacts on Energy may include:

- Energy requirements and energy use efficiencies by amount and fuel type for each stage of the project, including construction, operation, maintenance, and/or removal.
- Effects on local and regional energy supplies and requirements for additional capacity.
- Effects on peak and base period demands for electricity and other forms of energy.

- Degree to which the project complies with existing energy standards.
- Effects on energy resources.
- Transportation energy use requirements and overall use of efficient transportation alternatives.

Thus, potential impacts on Energy would occur if a project would:

- 1. Result in a substantial demand for energy that requires expanded supplies or the construction of new infrastructure or expansion of existing facilities, the construction of which could cause significant environmental effects.**

Earthmoving

Earthmoving (i.e., well pad construction, trenching for pipelines) throughout the term of Project implementation would create temporary increased demands for electricity and fuels compared to existing conditions and would result in short-term transportation energy use. Anticipated earthmoving activities would consist of construction of graded pads for wells, storage tanks, piping and electrical equipment; and possible trenching for pipeline connections between the wellhead and tanks. Equipment used for construction of graded pads usually consists of a bulldozer or backhoe. It is anticipated that only one bulldozer or backhoe would be required during construction of graded pads and trenching activities. A water truck is typically be used to provide water to control dust, as required by the South Coast Air Quality Management District. Again, it is anticipated that only one water truck would be required during earthmoving activities. All of these vehicles are typically diesel-powered and electrical usage is minimal during these construction activities.

Electrical and Natural Gas Energy Usage. Electrical usage would not substantively change with earthmoving activities. Equipment used during earthmoving activities are expected to use gasoline and diesel fuels and would not require electrical usage. As such, the demand for electricity during earthmoving activities would not require the development of new or expanded electrical infrastructure. Also, no natural gas demand is expected during earthmoving activities as no natural-gas earthmoving equipment or vehicles are expected to be used. Impacts on energy resources (electricity and natural gas) during earthmoving activities would be less than significant.

Fuel Energy Usage. Vehicle usage would fluctuate during earthmoving activities that could be ongoing until 2032. Transportation energy use depends on the type and number of trips; vehicle miles traveled; fuel efficiency of vehicles; and travel mode. Transportation energy use during earthmoving would come from the transport and use of earthmoving equipment and water trucks, and employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate during the various earthmoving activities and would be temporary. The maximum number of workers (including Oil Field Operator employees, contractors, inspectors, and other workers supporting earthmoving activities) commuting during earthmoving activities is anticipated to be approximately seven. The increase in demand for gasoline or diesel fuel for earthmoving vehicles would not require the development of new or expanded fuel processing equipment or have an effect on local /regional energy supplies. Impacts on fuel energy resources during earthmoving activities would be less than significant. No mitigation would be required.

Compliance with Energy Standards. The Project is not a land development project subject to Title 24 requirements; building and Appliance Energy Efficiency Standards would not apply. The Specific Plan has several requirements that would assist in energy efficiency and in meeting

energy standards. As discussed in Section 11.C of the Specific Plan, the Oil Field Operator shall comply with all applicable laws, regulations and standards of any local, State, or federal agency related to drilling, redrilling, reworking, maintenance, and production operations. This would include any applicable energy standards required for equipment used during earthmoving activities. As discussed in Section 21.H of the Specific Plan, Off-Road Diesel Construction Equipment Engines must utilize CARB/EPA Certification Tier 3 or better certified engines for engines below 750 horsepower and Tier 2 engines for engines at or above 750 horsepower or other methods approved by CARB as meeting or exceeding the Tier 2 or Tier 3 standards and utilize a CARB Verified Level 3 diesel catalyst. By implementing these requirements, the Project would comply with applicable energy standards.

Drilling, Operation, and Maintenance

Operation of the Project would create additional demands for electricity and natural gas compared to existing conditions and would also result in increased transportation energy use. Operational use of energy would include operation of electrical systems, security functions, use of on-site equipment such as pumps and generators; and outdoor lighting. It should be noted that the majority of electricity and natural gas usage would not be used directly on the Project Site; rather it would be used at the processing facilities located in the Los Angeles County portion of the Inglewood Oil Field (County IOF). However, the addition of up to 30 new wells at the Project Site would produce more oil, natural gas, and water that would need to be processed at these facilities located in the County IOF, and are therefore included in the energy usages for the Project. Well drilling rigs, maintenance rigs, and equipment used to support well stimulation activities would use transportation energy (i.e., gasoline- or diesel-powered equipment). Employee and inspector vehicles; trucks used for routine maintenance and operations activities; along with other delivery vehicles would all use transportation energy.

Electrical and Natural Gas Energy Usage. The Project Site is located within the Southern California Edison (SCE) service area. SCE delivered more than 87 billion kilowatt-hours (kWh)(87,000 gigawatt-hours [GWh]) of electricity, including 18 billion kWh (18,000 GWh) of renewable energy, to customers in 2015 (SCE 2017a, 2017b). The Baldwin Hills CSD EIR estimated that, at full build out (over 1,000 new wells drilled), the Inglewood Oil Field would use approximately 394 GWh/year of electricity (LACDRP 2008). The proposed Project in the City IOF allows a maximum of 30 new wells to be drilled until 2032. Scaling the estimated electrical consumption of the Baldwin Hills CSD EIR project down to the proposed Project's full buildout of 30 wells, the electrical consumption for the new 30 wells (including processing facility electrical usage consumed in the County IOF) is estimated to be 11.2 GWh/year. The total electrical consumption of 36 existing active wells plus 30 new wells within the Project Site, assuming no wells are abandoned or plugged, and no idle wells become active¹, would be approximately 24.5 GWh/year². These figures represent approximately 0.06 percent and 0.14 percent, respectively, of SCE's renewable power supply in 2015³. Electrical service to the Project would be provided by SCE through existing power service to the Project Site (LACDRP 2008). As such, no new off-site infrastructure improvements are anticipated.

Operational activities in the City IOF occur on a 24 hour a day, 7 day a week basis. As such, there is not a typical time or event that would result in a significant peak usage of energy that could

¹ The Oil Field Operator has the ability to alternate well status between active and idle in compliance with DOGGR regulations without any additional approvals from the City of Culver City. As such, the 5 idle wells on the Project site may become active again at any time, regardless of the proposed Project. The baseline for the Project includes 36 active and 5 idle wells.

² Calculated as $394 \text{ GWh/yr} / 1,060 \text{ new wells} = 0.37$; $0.37 * 30 = 11.2$; $0.37 * 66 = 24.5$.

³ Calculated as $(11.2 \text{ GWh} / 18,000 \text{ GWh}) * 100 = 0.06$; $(24.5 \text{ GWh} / 18,000 \text{ GWh}) * 100 = 0.14$.

substantially affect the SCE power grid's ability to accommodate peak demands. Peak demand is the highest point of customer consumption of electricity, and usually occurs in the afternoons when there is a combination of commercial and residential overlapping activity. Energy demand on the Project Site would not follow typical commercial/residential usage patterns and would not be expected to create a significant effect on either peak or base load energy demands from SCE. Impacts on electrical supplies would be less than significant, and no mitigation is required.

Additionally, the State has set aggressive goals for greenhouse gas emission reductions, including AB 32, now followed by SB 32, in which CARB must ensure that statewide greenhouse gas emissions are reduced to 40 percent below the 1990 level by 2030. While AB 32 establishes control measures that would apply to light, medium, and heavy-duty vehicles, and the proposed Project will operate those types of vehicles, these measures are being implemented at the State level and the proposed Project would not interfere with the implementation of the control measures. Implementation of AB 32 control measures for reduced vehicle emissions would decrease GHG emissions from the proposed Project. Similarly, measures requiring utilities to increase renewable energy sources are not implemented by the proposed Project, and the Project would not conflict with implementation; however, the Project would consume electricity for the operation of the wells. Therefore, Project-related GHG emissions would be reduced as utilities purchase electrical power generated from sources with lower GHG emissions.

As discussed in Section 4.2, Air Quality, MM AQ-3 requires the Oil Field Operator to demonstrate that the activities included in the Annual Drilling Plan will be conducted in compliance with performance standards that correspond to the SCAQMD's operational thresholds of significance. MM AQ-3 may be met through a number of options that reduce, minimize, or eliminate certain air emissions from the proposed Project, including the use of electric drilling rigs and pumps. Well drilling rigs generally require 750 brake horsepower (bhp) to power the drill and mud pumps. As such, well drilling activities are assumed to require four primary diesel-powered engines of approximately 750 brake horsepower (bhp) or less for each drilling unit (i.e., 750 bhp x 4 units = 3,000 bhp). Converted to electrical energy, this would require 2,237 kW. This could have effects on peak demands for electricity because drilling operations occur over the course of 24-hours. In order to accommodate an estimated 2,237 kW of additional power for the use of electricity to power a drill rig may require upgrades to the existing SCE substations, transmission lines, and/or internal Inglewood Oil Field utility poles may be required. As such, coordination with SCE would be required to ensure that adequate supplies were available and/or adequate infrastructure could be provided to accommodate the increased demand. However, the use of this additional electricity would not be considered an inefficient use energy. The use of electricity to power certain oil field operations would provide important benefits due to the reduction of diesel fuels that result in diesel particulate matter (DPM), which is a Toxic Air Contaminant (TAC). Additionally, MM AQ-3 does not mandate the use of electricity to power the drill rigs.

Natural gas is used in the process heater in the Gas Plant located at the Inglewood Oil Field (LACDRP 2008). This Gas Plant is located outside of the Project Site but would be used to process the natural gas produced during routine operations. The Baldwin Hills CSD EIR estimated that natural gas consumption at full buildout would be 1,600 million cubic feet (mmcf⁴) per year (LACDRP 2008). Scaling the estimated natural gas consumption of the Baldwin Hills CSD EIR project down to the proposed Project's full buildout within the City IOF of 30 wells, the natural gas consumption associated with the 30 new wells (including processing facility natural gas usage consumed in the County IOF) would be estimated to be 45 mmcf per year (or approximately 124 mcf per day [mcf/d] of natural gas. The total natural gas consumption associated with 36 existing

⁴ msf is an abbreviation denoting a thousand cubic feet of natural gas. One million cubic feet is denoted as mmcf. The "m" in mcf comes from the ancient Roman letter M, which stood for one thousand.

active wells plus 30 new wells located within the Project Site, assuming no wells are abandoned, plugged, or idle, and idle wells would not become active, would be 101 mmcf per year.

In 2006, the entire Inglewood Oil Field produced approximately 5,700 mcf/d from 436 active producing oil wells (LACDRP 2008). This equated to an average of approximately 13 mcf/d of natural gas per active producing oil well. Scaling the estimated natural gas production from the CSD EIR proportionally to the proposed Project's Maximum Buildout Scenario of new 30 wells, the natural gas production for the City IOF is estimated to be 392 mcf/d. Based on these values (124 mcf/d consumption and 392 mcf/d production), the Project would consume approximately 32 percent of the natural gas produced in the City IOF. As such, the Project would generate more natural gas than it would consume. As a result, the Project would not require the development of new natural gas sources, nor would it create a need to upgrade existing facilities or infrastructure line capacities to serve the Project. Impacts on natural gas supplies would be less than significant, and no mitigation is required.

Fuel Energy Usage. Transportation energy use during Project operations would come from the use of motor vehicles for employee vehicle trips to and from their homes to the Project Site, routine operations trucks, mud pumps during drilling, and generators for drill rigs and maintenance rigs powered by diesel engines (LACDRP 2008). Additional equipment using transportation energy for well stimulation activities are described in Table 6-5, Equipment Required for Existing Hydraulic Fracturing Activities, in Section 3.0, Project Description. Most of this equipment is operated by diesel or gasoline engines (DOC 2015).

In 2006, the entire Inglewood Oil Field produced approximately 8,700 barrels per day (bpd) (365,400 gallons per day [gpd]) of oil from 436 active producing oil wells (LACDRP 2008). This equates to an average of approximately 20 bpd of oil (840 gallons per day) per active producing oil well. Current active production wells on the Project Site including 26 oil production wells and 10 production water injection wells. Assuming the same ratio of production to injection wells for future wells, at the Maximum Buildout Scenario within the Project Site, there would be 22 future production wells and 8 future injection wells. Assuming the same average oil production rates per well are still valid at full buildout, the average approximate oil production per day at the Project Site would be 440bpd (18,480 gallons per day) of oil. Assuming production is 365 days of the year, the annual oil production at the Project Site would be 160,000 barrels per year (6,745,200 gallons per year).

According to the Baldwin Hills CSD EIR, approximately 44,000 gallons of gasoline per year was used by equipment to support operations at the entire Inglewood Oil Field (with 436 active producing wells), and approximately 150,000 gallons of diesel fuel per year was used for drilling operations (LACDRP 2008). There were 58 new wells drilled in 2006. No well stimulation activities occurred at the Inglewood Oil Field in 2006.

Scaling the 2006 gasoline usage, the estimated gasoline usage at the Project Site for 30 new wells would be 3,028 gallons of gasoline per year. Since the Specific Plan only allows a maximum of three new wells to be drilled in any given year, the maximum diesel fuel usage for drilling new wells would be 7,759 gallons in one year. During well stimulation activities, as much as 7,800 gallons of diesel fuel can be required by well stimulation equipment per well (NVG 2014). As outlined in the Maximum Buildout Scenario in Section 3.0, Project Description, the maximum number of wells estimated to have well stimulation treatment during one year is one well. Therefore, it is assumed that 7,800 gallons of diesel fuel would be used during well stimulation activities in the Maximum Buildout Scenario. This would bring the total diesel fuel consumed to be 15,559 gallons per year within the Project Site.

While activities at the Project Site would result in an overall gasoline and diesel fuel consumption increase (3,028 gallons and 15,559 gallons per year, respectively), the Project would send over 6.7 million gallons of oil annually to refineries for gasoline and diesel fuel processing. One barrel of oil can produce 19 gallons of gasoline or 12 gallons of diesel fuel (EIA 2017). Therefore, the Project would require 159 barrels of oil for gasoline usage and 1,297 barrels of oil for diesel fuel usage, for a total of 1,456 barrels of oil per year for fuel supplies. This is approximately 0.42 percent of the total oil (approximately 350,400 barrels) that would be sent to refineries annually based on Project Site production. As such, the Project would not result in a substantial demand for energy that would require expanded supplies or the construction of other infrastructure or expansion of existing facilities. Impacts would be less than significant and no mitigation is required.

Compliance with Energy Standards. Sections of the Specific Plan, in addition to those described under earthmoving above, would include Section 11.B of the Specific Plan that requires that proven reasonable and feasible technological improvements capable of reducing the environmental impacts of drilling and re-drilling to surrounding uses and the environment shall be promptly implemented to the extent such technology is commercially available. Section 11.B also requires the Oil Field Operator to submit a Clean Technology Assessment identifying technologies which have been achieved in practice in North America which are capable of reducing impacts in the following areas: air quality (including without limitation electrified and natural gas-powered drill rigs), groundwater quality, spill and upset prevention and containment, odors, aesthetic, noise and greenhouse gas emissions. Finally, Section 11.B requires that such technology be implemented in connection with wells identified in the Annual Drilling Plan unless the Oil Field Operator demonstrates the technology is not technologically feasible or is not commercially available. By implementing these requirements, the Project would comply with applicable energy standards.

City IOF Decommissioning

Section 52 of the Specific Plan outlines oil field abandonment procedures. This includes providing an Abandonment Plan which provides a timeline for facility removal, site assessment, and remediation. It also requires that the site be recontoured and revegetated within one year of shutdown. Activities involved in decommissioning would be similar to those of the Project, including earthmoving activities (for recontouring), abandonment of wells during routine operations, and landscaping which would be similar to revegetation. The energy requirements for decommissioning are expected to be less than the requirements during earthmoving and operation and maintenance activities due to expected improvements in energy efficiency requirements for equipment. However, determining the future energy requirements for the decommissioning of the entire Project Site is not reasonably foreseeable and cannot be calculated at this time. However, it is because a one-time abandonment of a well is less energy-intensive than new drilling and ongoing maintenance, it is expected that decommissioning activities would be less energy intensive than development and operation of the City IOF, as allowed under the Specific Plan.

2. Result in an inefficient, wasteful and unnecessary consumption of energy.

Earthmoving energy use could be considered wasteful, inefficient, or unnecessary if earthmoving equipment is old or not well maintained, such that its energy efficiency is lower than newer equipment; if equipment is left or to idle even when not in use; if earthmoving activity related trips utilize longer routes than necessary; or if excess electricity and water (which would indirectly require the use of energy for the extraction, treatment and conveyance of water) is used during earthmoving activities. As discussed in Section 22.1 of the Specific Plan, unnecessary idling of

construction equipment internal combustion engines is prohibited. As discussed in Section 21.H of the Specific Plan, Off-Road Diesel Construction Equipment Engines must utilize CARB/EPA Certification Tier 3 or better certified engines for engines below 750 horsepower and Tier 2 engines for engines at or above 750 horsepower or other methods approved by CARB as meeting or exceeding the Tier 2 or Tier 3 standards and utilize a CARB Verified Level 3 diesel catalyst.

Earthmoving activity related traffic is expected to use La Cienega Boulevard to access Interstate 405, which is the most direct and shortest route from the Project Site to the regional freeway system. Electrical energy would be available for use during earthmoving activities from existing power lines and SCE connection, avoiding the use of generators that are less efficient than tying into SCE infrastructure. Thus, energy use during the various earthmoving activities allowed by the Project would not be considered inefficient, wasteful, or unnecessary. Impacts would be less than significant and no mitigation is required.

Long-term energy use would be considered wasteful if alternative energy sources are not used when they are feasible/available, and would be considered inefficient if operational techniques and materials are not compliant with technological requirements.

Section 11.B of the Specific Plan requires that proven reasonable and feasible technological improvements capable of reducing the environmental impacts of drilling and re-drilling to surrounding uses and the environment shall be promptly implemented to the extent such technology is commercially available. Section 11.B also requires the Oil Field Operator to submit a Clean Technology Assessment identifying technologies which have been achieved in practice in North America which are capable of reducing impacts in the following areas: air quality (including without limitation electrified and natural gas-powered drill rigs), groundwater quality, spill and upset prevention and containment, odors, aesthetic, noise, and climate change. Finally, Section 11.B requires that such technology be implemented in connection with wells identified in the Annual Drilling Plan unless Oil Field Operator demonstrate the technology is not technologically feasible or is not commercially available. As such, electrical and natural gas demands from the Project would not be considered inefficient, wasteful, or unnecessary.

Transportation energy use is estimated above. The vehicular energy (i.e., gasoline and diesel fuel) required to operate vehicles and equipment at the Project Site would not be considered wasteful, inefficient, or unnecessary. The Project would not generate unnecessary vehicular travel. Therefore, the associated energy use by the Project would not be considered inefficient, wasteful, or unnecessary. Impacts would be less than significant and no mitigation is required.

6.6 REFERENCES

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