

DISCUSSION DRAFT OIL DRILLING REGULATIONS **FOR THE CULVER CITY PORTION OF THE** **INGLEWOOD OIL FIELD**

NOTE: The following is City staff's initial Discussion Draft of the substantive regulations proposed for the Culver City portion of the Inglewood Oil Field. City staff intends to request, at a future public meeting, that the City Council, by resolution, initiate the preparation and processing of a Specific Plan, in accordance with the procedures set forth in Culver City Municipal Code, Chapter 17.570, incorporating these substantive regulations.

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SECTION 1. PURPOSE AND INTENT.

The provisions in this Ordinance establish safeguards and controls for activities related to drilling for and production of oil, gas, and other hydrocarbon substances within the City including, but not limited to, the following:

- A.** Oil Operations are conducted in harmony with adjacent land uses;
- B.** Cooperation with affected and adjacent government agencies in implementing all reasonable measures to reduce impacts to the surrounding communities;
- C.** Cooperation and coordination for multi-agency response to Oil Field emergency situations;
- D.** Minimization or elimination of potential adverse impacts of Oil Operations by the implementation of area-specific regulations and mitigation measures;
- E.** Before new Oil Field drilling activities are permitted, that existing Oil Field facilities are in compliance with the requirements of this Ordinance;
- F.** Minimization of Oil Field emergencies; in the event that an emergency occurs, regulations are in place to assist affected and adjacent government agencies in identifying all reasonable measures to reduce impacts to surrounding communities;
- G.** Appearance of the Oil Field site is enhanced with landscaping and other property maintenance requirements; and
- H.** New applications for oil and gas Drilling Use Permits address the consolidation of Oil Field facilities to reduce odor, visual, noise, safety, health, and environmental impacts from Oil Operations to surrounding land uses and City residents.

SECTION 2. ACRONYMS AND DEFINITIONS.

A. Acronyms.

API – American Petroleum Institute

CalARP – California Accidental Release Prevention Program.

CARB – California Air Resources Board

CCMC – Culver City Municipal Code

CEQA – California Environmental Quality Act (PRC §§ 21000, *et seq.*) and the CEQA Guidelines (Title 14, CCR §§ 15000, *et seq.*)

dBA – decibel (measurement of noise level)

DOGGR – California Department of Conservation, Division of Oil, Gas and Geothermal Resources

EIR – Environmental Impact Report

EPA – United States Environmental Protection Agency

ERP – Emergency Response Plan

MND – Mitigated Negative Declaration

ND – Negative Declaration

NFPA – National Fire Protection Association

RWQCB – Regional Water Quality Control Board, Los Angeles Region

SIMQAP – Safety Inspection, Maintenance, and Quality Assurance Program

SCAQMD – South Coast Air Quality Management District

SWPPP – Stormwater Pollution Prevention Plan

SPCCP – Spill Prevention, Control, and Countermeasure Plan (40 CFR, Part 112)

B. Definitions. In addition to the definitions contained elsewhere in this Code, the following words and phrases shall, for the purposes of this Ordinance, be defined as follows, unless it is clearly apparent from the context that another meaning is intended. Should any of the definitions be in conflict with any other provisions of the CCMC, these definitions shall prevail.

Abandonment. The permanent plugging of a well, pipeline, or other facility in accordance with the requirements of DOGGR, the removal of all equipment related to the well, including the restoration of the drill site or well operation site as required by DOGGR regulations.

Annual Drilling Plan. The Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan as set forth in Section 31.

Blowout. An uncontrolled release of gas, oil, or other well fluids from the well.

Blowout Prevention. The use of a mechanical, hydraulic, pneumatic or other device or combination of such devices, secured to the top of a well casing, including valves, fittings, and control mechanisms connected therewith which can be closed around the drill pipe or other tubular structures which completely closes the top of the casing and is designed for preventing blowout.

Bottom Hole. The underground location at which drilling terminates.

Breakdown. Any event that results in a violation of applicable SCAQMD rules as specified in SCAQMD Rule 430.

California Environmental Quality Act (CEQA). State law that requires the evaluation of a project's potential impact on the environment such as impacts to air quality, aesthetics, noise, as examples. CEQA is found in Public Resources Code §§ 21000, et seq. and the CEQA Guidelines (Title 14, California Code of Regulations §§ 15000, et seq.), which provide guidance on the content, format, and process for preparing environmental reports.

City. The City of Culver City.

City Council. The City Council of the City of Culver City.

Community Development Director. The Director of the Community Development Department of the City of Culver City, or his/her designee.

Comprehensive Drilling Plan. A long-range plan consistent with this Ordinance, proposed by each Operator within the Oil Field, which describes and depicts the Oil Operations through the year 2028.

Deep Zone Well. A well where the Bottom Hole is proposed in a deep zone (Nodular Shale and Sensitive zones or other zones approximately 8,000 feet or deeper),

Derrick. Any portable framework, tower, mast, or structure which is required or used in connection with drilling, re-drilling, reworking, operating, or maintaining a well.

Developed Area. Any lot or parcel of land containing any residential, recreational (e.g. public park), institutional (e.g. school), commercial, industrial or office structure, or used for residential, recreational, institutional, commercial, industrial or office purposes. This definition does not include structures that serve administrative functions in the Oil Field.

Drilling. The digging or boring into the earth for the purpose of exploring for, developing, extracting or producing oil, gas, or hydrocarbon substances from the earth or injecting water, steam, or any other fluid or substance into the earth, but does not include remediation efforts to clean-up or remove contamination.

Drilling Project. The erection of any derrick, or similar or related structure and/or use of any mobile drilling equipment for the drilling, re-drilling, reworking, maintenance or deepening of any Well hole. It shall also include the installation and operation of pumps or similar equipment for the production of oil and gas or injection of water.

Drilling Use Permit. A City permit reviewed and processed in compliance with this Ordinance which is necessary to conduct any Drilling Project. More than one Drilling Project may be approved under one Drilling Use Permit.

Drilling Equipment. The derrick, together with all parts of and appurtenances to such structure and, every piece of apparatus, machinery, or equipment used or erected or maintained for use in connection with drilling or re-drilling, reworking, maintenance or deepening of any well hole.

Drill Site. That portion of any land on which drilling equipment is placed, stored, or utilized during the drilling, re-drilling, reworking, maintenance or deepening of a well.

Effective Date. The effective date of the Ordinance establishing the provisions contained in this Ordinance.

Emergency Response Plan. A plan to handle anticipated emergencies as required by Section 5192 of Title 8 of the California Code of Regulations and the EPA requirements set forth in 40 Code of Federal Regulations 112, or with any emergency response regulations enacted or modified by the State of California or EPA or local agency, which are applicable to the Oil Field.

Enhanced Oil Recovery. Any production method which involves the injection of water, gas, steam, or any other fluid or substance into the earth for the purpose of extracting oil.

Fire Chief. The Fire Chief of the City of Culver City or his or her designee.

Fluids. A substance which molecules move freely without a fixed shape, this includes any liquid or gas.

Fracking. See Hydraulic Fracturing.

Gas. Any substance, either combustible or noncombustible, which is produced in a natural state from the earth and which maintains a gaseous or rarefied state at standard temperature and pressure conditions. It shall also mean the gaseous components or vapors occurring in, or derived from, petroleum or natural gas.

Idle Well. Any well that has not produced oil or gas or has not been used for injection for six consecutive months of continuous operation during the last five or more years. An idle well does not include an active observation well.

Inglewood Oil Field. The approximate 1000-acre oil field located within the jurisdiction of the City of Culver City and the unincorporated area of the County of Los Angeles known as Baldwin Hills.

Injection Well. Any well used for the purpose of injecting water, produced water, waste water, brine, hydrocarbons, steam, or any other substance as a means of enhanced oil recovery.

Hydraulic Fracturing. An Enhanced Oil Recovery technique used in stimulating a formation or zone that involves the pressurized injection of hydraulic fracturing fluid and proppant (such as sand) into an underground geologic formation in order to fracture the formation, thereby causing or enhancing the production of oil or gas from a Well.

Maintenance. The diagnosis, repair or replacement of machinery, equipment, apparatus, structures, facilities, and parts thereof, used in connection with Oil Operations as well as any other work necessary to reduce public health or safety hazards, other than drilling, redrilling, or reworking.

Major Facilities. Major facilities include refineries, tank farms or single tanks larger than 5,000 barrels, fractionation (such as distillation), absorption plants, gas plants, gas processing, bioremediation facility, steam drive plant, oil cleaning plant, carbon dioxide separation or recovery plant, or water treating and processing facility. Major facilities are prohibited within the Oil Field.

Mid-Zone Well. A well where the Bottom Hole is located in a mid-zone (Rubel, Moynier, Bradna, and City of Inglewood zones or any other zone between approximately 3,500 to 7,999 feet deep).

New Well. A new well bore or well hole established at the ground surface or the deepening or redrilling of an existing well. An abandoned well that is redrilled shall be considered a new well.

Odor Suppressant. An organic emulsifier, or other compound, that is used to eliminate hydrocarbon odors by reducing the odor causing component of hydrocarbon materials.

Oil. Crude oil.

Oil Field. The approximate 115-acre area of the Inglewood Oil Field that falls within the jurisdiction of the City of Culver City.

Oil Operations. Any activity undertaken in connection with the extraction, processing, production, storage, or transport of oil, gas, or other hydrocarbon substances including, but not limited to, drilling, redrilling, reworking, maintenance, repair, installation, construction operations, processing, enhanced oil recovery, bioremediation, well abandonment, remediation, clean-up, demolition, restoration, and revegetation.

Operator. A person, firm, corporation, partnership, association, or other business entity that owns or holds the right to use the surface of the land to extract oil, gas, and other hydrocarbon substances. In the event there are two or more persons or entities who qualify as Operators at any given time, then this term shall apply to all entities with regard to their respective operations. Operator shall include any applicant who has applied for, received approval of, or acquired through transfer or assignment, a Drilling Use Permit or its equivalent.

Outer Boundary. The exterior surface limits of the Oil Field within the City's jurisdiction and contiguous with Developed Areas.

Permanent Structure. Any building, facility, or equipment that is intended to, or does, remain in place for more than one year, and shall include all tanks.

Processing. The activities required for oil, gas or other hydrocarbon extraction, phase separation, and transport, but does not include oil and gas processing activities identified in the prohibited Major Facilities defined above. Processing includes unheated phase separation and dehydration of crude oil and gas produced from the well, the storage, handling, recycling, and transportation of such materials; and those processing operations required for water injection purposes.

Public Works Director/City Engineer. The Director of Public Works/City Engineer of the City of Culver City or his/her designee.

Pure Tones. Any noise which is judged as audible as a single frequency or a set of single frequencies. Pure tones include but are not limited to noise from whistles, bells, fans or other mechanical devices that emit audible tones.

Redrilling. Any drilling operation conducted through the surface opening of an existing well to deepen the existing well or to create a new bore hole diverting below the surface of the earth from an existing bore of an existing well.

Reworking. Recompletion of an existing well, which includes operations such as liner replacements, perforating and acidizing, but does not include deepening or sidetrack operations that extend beyond the existing well bore. The principal piece of equipment used for reworking is sometimes referred to as a workover rig.

Shallow Wells. The Bottom Hole is less than 3,500 feet deep.

Sensitive Developed Area. A lot or parcel that contains a single or multi-family residence, park, school, or health care facility.

Settlement. The sinking of the land surface due to consolidation or compaction of the soil when the voids containing water or air are reduced, causing the soil particles to pack together more tightly and reducing the overall volume of soil.

Slant Drilling. Non-vertical drilling, directional drilling, or drilling at a relatively significant angle.

Spill Prevention, Control, and Countermeasure Plan (SPCCP). A plan required under 40 Code of Federal Regulations Part 112, or of any subsequently enacted and currently in effect EPA provisions. The SPCCP addresses the prevention, control, and mitigation of oil spills to avoid impacts to navigable waters.

Subsidence. The Settlement or sinking of the ground surface due to extraction of petroleum or groundwater.

Top Hole. The surface location from which drilling is commenced.

Uplift. The rising or rebound of the ground surface.

Well. Any oil or gas well, or well for the discovery of oil or gas or for the production of oil or gas, or any well on lands producing or reasonably presumed to contain oil or gas or any well drilled for the purpose of injecting fluids or gas for the purpose of stimulating oil or gas recovery, repressuring or pressure maintenance of oil or gas reservoirs, or disposing of Oil Field waste fluids or any well drilled or adjacent to an oil or gas pool for the purpose of obtaining water to be used in production stimulation or repressuring operations.

Well Servicing. Any maintenance work performed within any existing well bore, which does not involve drilling, redrilling, or reworking.

SECTION 3. APPLICABILITY.

- A. Comprehensive Drilling Plan.** Prior to the submittal by each Operator of the first application for a Drilling Use Permit under this Ordinance, the Operator shall submit, for review and approval by the City Council, a Comprehensive Drilling Plan.
- B. Annual Drilling Plan.** At the beginning of each year of the Comprehensive Drilling Plan period, Operator shall submit, for review and approval by the Community Development Director, an Annual Drilling Plan in accordance with the provisions of Section 31.
- C. Drilling Use Permit.** An application for a Drilling Use Permit shall be required for any Drilling Project. All Drilling Use Permits shall be consistent with the approved Comprehensive Drilling Plan and Annual Drilling Plan. A Drilling Use Permit shall only be issued for drilling in accordance with this Ordinance. Drilling without a Drilling Use Permit is prohibited.

SECTION 4. APPLICATION FILING, PROCESSING, REVIEW AND FEES.

A. Filing.

- 1. Comprehensive Drilling Plan.** A Comprehensive Drilling Plan covering the period of Oil Operations through the year 2028, shall be filed by each Operator for review and approval by the City Council, prior to the approval of any Annual Drilling Plan or issuance of any Drilling Use Permit. The Comprehensive Drilling Plan shall include the maximum number of wells proposed to be drilled or redrilled through 2028, which shall not exceed a total of 30 wells; the location, extent and depth of the oil-producing formations and zones; the scope, location, depth and extent of the Drill Sites; the type and nature of the oil recovery methods; the size, type and location of the structures and Drilling Equipment to be utilized in connection with Oil Operations; a description of the number and location of existing wells and equipment used in existing Oil Operations; and such additional information as may be required by the Community Development Director to demonstrate consistency with this Ordinance. Any revisions to the Comprehensive Drilling Plan shall be reviewed and approved by the City Council in the same manner as the initial Comprehensive Drilling Plan. It is the responsibility of the Operator to establish evidence in support of the findings required by Section 5 (Findings and Decision), below.
- 2. Annual Drilling Plan.** At the beginning of each year of the Comprehensive Drilling Plan period, an Annual Drilling Plan shall be filed by each Operator in accordance with the provisions of Section 31.
- 3. Drilling Use Permit.** An application for a Drilling Use Permit shall be completed, filed, and processed in compliance with this Ordinance prior to the commencement of any Drilling Project. The application package shall include

all information specified in the application and any additional information required by the Community Development Director in order to conduct a thorough review of the proposed Drilling Project.

B. Permit Application and Renewal Fees.

1. The Operator shall pay to the City:
 - a. A fee for the processing of the Comprehensive Drilling Plan.
 - b. A fee for the processing of each Annual Drilling Plan.
 - c. A permit fee for the Drilling Use Permit or transfer of ownership, payable at the time of filing the application.
2. The fees set forth in this Section shall be established by a resolution of the City Council per Section 9.G.
3. All permit fees, as required in this Ordinance, shall constitute a lien on the premises where the drilling is occurring to the extent of the Operator's interest therein.
4. The permit fees, as required in this Ordinance, are in addition to any other applicable fees required by the CCMC.

C. Plans, Permits and Environmental Conditions.

As a condition of approving any Comprehensive Drilling Plan or Annual Drilling Plan, or granting any Drilling Use Permit, the City Council or Community Development Director, as applicable, may modify any of the requirements, standards, thresholds or mitigation measures of this Ordinance, or plan or study required by this Ordinance, or impose additional requirements, standards, thresholds or mitigation measures as determined by the City Council or Community Development Director, as applicable, to be necessary to adequately protect the public health and safety and the environment from Oil Operations. The City Council or Community Development Director, as applicable, may also determine that certain requirements, standards, thresholds or mitigation measures in this Ordinance should be waived or lessened in order to avoid unintended environmental impacts.

D. Plan Approval and Permit Issuance.

1. The Comprehensive Drilling Plan shall be reviewed and approved by the City Council in accordance with the Findings set forth in Section 5.
2. All Annual Drilling Plans shall be reviewed and approved by the Community Development Director in accordance with the provisions set forth in Section 31.
3. All Drilling Use Permits shall be reviewed and approved by the Community Development Director in accordance with the provisions of this Ordinance.
4. No Drilling Use Permit shall be issued, nor shall any construction permits be issued, until all permit fees are paid in full, and all existing Oil Operations are in

substantial compliance with all conditions of existing Drilling Use Permits and all provisions of this Ordinance.

SECTION 5. FINDINGS AND DECISION.

The Comprehensive Drilling Plan may be approved, with or without conditions, only after first making all of the following findings, and any additional findings as determined by the City Council to be necessary to protect the public health, safety and welfare, and the environment.

- A.** The Comprehensive Drilling Plan is consistent with the provisions of this Ordinance and all other applicable provisions of the CCMC.
- B.** Reasonable and feasible measures were identified and required to reduce and minimize potentially significant impacts from the Oil Operations.
- C.** The Oil Operations described in the Comprehensive Drilling Plan will not be detrimental to the public interest, health, safety, or general welfare, or the environment, or injurious to persons, property, or improvements in the vicinity of and areas surrounding the Oil Field.

SECTION 6. CONDITIONS ON ASSIGNMENT OF PERMIT.

- A.** No Drilling Use Permit issued pursuant to this Ordinance may be assigned or otherwise transferred by the Operator without first obtaining consent to the proposed assignment or transfer from the Community Development Director. In the event the Operator desires to transfer its rights to a new Operator, the Operator shall notify the Community Development Director of the proposed transfer, and shall submit in writing the following information: (1) the name and address of the proposed new Operator, (2) the Operator's interest in the Drilling Project, (3) the proposed date of the transfer, (4) the name, address, phone number and email address of the proposed new Operator's agent designated for service of notices, (5) written acknowledgement by the proposed new Operator that it will be bound by, and will comply with, all provisions of this Ordinance and all conditions imposed in connection with any permits, consents or approvals granted pursuant to this Ordinance, and (6) information from the proposed new Operator that will satisfy the financial responsibility required by this Ordinance.
- B.** Prior to the Community Development Director's consideration of an assignment, a new application for a Drilling Use Permit shall be filed and the new Operator shall be required to comply with all conditions and requirements, which are in effect at the time of assignment.
- C.** Any existing Drilling Use Permit, which has been assigned or transferred contrary to the provisions of this Ordinance, shall be subject to revocation by the Community Development Director.

- D. As a condition to receiving approval for a transfer, a prospective new Operator must demonstrate, to the satisfaction of the Community Development Director, a complete understanding of and ability to fully comply with all provisions of this Ordinance (including but not limited to an ability to comply with all of the insurance, indemnification and other financial responsibility requirements). No later than 90 days after the assignment or transfer, the new Operator shall provide the Community Development Director with evidence that all new Operator's personnel have received training and are capable of fully complying with all safety and environmental protection requirements.
- E. The Community Development Director may impose reasonable conditions in connection with any approval of a proposed assignment or transfer, and any such approval will not be effective unless and until the proposed new Operator(s) accepts such conditions in writing.

SECTION 7. CONDITION COMPLIANCE.

- A. The Operator shall prepare a Condition Compliance Plan that details how and when measures will be implemented to ensure effective implementation of all requirements of this Ordinance. Within 30 days of the approval of each Annual Drilling Plan, the Operator shall submit a Condition Compliance Plan to the Community Development Director for review and approval. The following provisions should also be addressed:
 - 1. The Condition Compliance Plan shall provide a detailed description of the steps the Operator shall take to assure compliance with all provisions of this Ordinance, including but not limited to, all of the monitoring programs for noise, vibration, odors, etc., called for by this Ordinance. The Operator shall fully comply and shall ensure that all employees and contractors fully comply with all provisions of the approved Condition Compliance Plan.
 - 2. The Operator shall comply with all timelines and review procedures identified in the Condition Compliance Plan. If specific timelines cannot be met as approved, the Operator shall not proceed until it has reached an agreement with the City on the best approach for implementing a requirement of this Ordinance or the Condition Compliance Plan.
 - 3. The Condition Compliance Plan shall be updated as necessary and submitted to the Community Development Director for approval. The Operator shall respond to any request for additional information within 30 days of receiving such request, unless extended by the City.
 - 4. At the City's discretion and on a project-by-project basis, the City may require the Operator to fund one or more persons to monitor compliance with this Ordinance (hereafter "On-Site Monitor"). The number of On-Site Monitors shall be determined by the City and shall take into account the scope of the project. The On-Site Monitor(s) shall be selected by, and shall report to, the Community

Development Director. The responsibilities of the On-Site Monitor(s) shall include:

- a. On-site, day-to-day monitoring of construction or drilling and redrilling activities as determined by the City;
- b. Ensuring the Operator and all employees, contractors and other personnel has knowledge of and are in compliance with all applicable provisions of this Ordinance;
- c. Evaluating the adequacy of drilling and/or construction measures, and proposing improvements to the Operator and their respective contractors, and the City;
- d. Requiring correction of activities that are in violation of any provision of this Ordinance or are determined to be unsafe or dangerous conditions; and
- e. Reporting to and maintaining prompt and regular communication with the various City agencies with oversight responsibility at the project site or Oil Field, other appropriate agencies, such as DOGGR and SCAQMD, and with the Operator and personnel responsible for Operator's contractor performance and compliance.

SECTION 8. EXPIRATION, REVOCATION OR MODIFICATION OF PERMIT.

- A. A Drilling Use Permit shall expire 90 days from the date of approval if actual drilling operations have not commenced, unless otherwise specified in the Permit.
- B. If drilling or other substantial work on a well ceases for a period of 180 days, as determined by the Community Development Director, Operator shall abandon the drilling and the Drilling Use Permit for that well shall expire.
- C. Reactivation of an abandoned well shall require the filing and approval of a new Drilling Use Permit application by the Community Development Director.
- D. A time extension for the expiration period set forth in Subsections 15.14.035.A and 15.14.035.B, herein above, may be requested in writing by the Operator, accompanied by the required filing fee. The burden of proof is on the Operator to establish, with substantial evidence, that the Drilling Use Permit should be extended. Upon determination that the Operator has made a good faith effort to commence actual drilling operations, the Community Development Director may extend the time to establish an approved Drilling Use Permit.
- E. A Drilling Use Permit may be revoked or modified by the Community Development Director in reliance on written or oral testimony or other information which, by a preponderance of evidence, shows it is in the interest of the public health, safety or general welfare or for the protection of the environment, to revoke or modify the Permit.

1. The Community Development Director shall hold a public hearing to determine if the Permit granted in compliance with the provisions of this Ordinance should be revoked or modified. Written notice shall be mailed at least 21 days before the public hearing to the Operator and property owner, as identified in the records of the Los Angeles County Assessor, unless a more current source of this information is known.
2. The Community Development Director's decision to revoke or modify a Drilling Use Permit may be appealed to the City Council by submitting a written request for appeal with the City Clerk within 15 calendar days after the decision date identified in the notice of decision. The appeal shall specifically state the pertinent facts of the case and the basis for the appeal. Appeals shall be accompanied by the filing fee established by the City Council Fee Resolution.
3. Upon notification to the Operator and property owner of a revocation or modification hearing, the Drilling Use Permit shall be automatically suspended. When necessary, in order to protect public health or safety or the environment, an authorized City official may order all or any portion of the operations formally authorized by the Drilling Use Permit, to cease during the time of suspension.

SECTION 9. OTHER ADMINISTRATIVE ITEMS.

A. Draw-Down Account.

1. The Operator shall maintain an account with the City from which actual costs will be billed and deducted for the purpose of expenses involved in the City's review, processing, assessment, monitoring and enforcement of the Drilling Use Permit (hereinafter "Draw-Down Account").
2. The Draw-Down Account will be used for covering the expense of verification of the information contained in any required applications or reports, enforcement, permitting, audits, mitigation monitoring, undertaking studies, research and inspections, administrative support, fire training and equipment, the hiring of independent consultants, and the fully burdened cost of time spent by City employees on such matters, as those costs are defined in the City's User Fees and Charges schedule as adopted by resolution of the City Council.
3. The initial amount to be deposited by the Operator shall be determined by the City's Chief Financial Officer based on the overall cost and scope of the proposed Drilling Use Permit.
4. Withdrawals from the Draw-Down Account must be approved by the City's Chief Financial Officer.
5. Whenever withdrawals from the Draw-Down Account have reduced the balance to less than 50 percent of the initial amount deposited, the Operator shall deposit supplemental funds within 30 days of the date of written notification to bring the Draw-Down Account to at least 75% of the initial amount deposited. There is no limit to the number of supplemental deposits that may be required.

6. The City's Chief Financial Officer may, from time to time, increase the minimum amount of supplemental funds to account for inflation or the City's experience in obtaining funds from the Draw-Down Account or as to the adequacy of the funds to cover the expenses.

B. Bond and Insurance Requirements. No Drilling Use Permit shall be issued pursuant to this Ordinance, unless the Operator has complied with and satisfied all bond and insurance requirements established by resolution of the City Council, which may be periodically updated. These insurance requirements shall be in addition to all other indemnification, insurance and performance security required by federal, state, and local regulations and permits.

C. Indemnification.

1. Operator, and any approved assignee and transferee, shall indemnify, defend (with legal counsel approved by the City) and hold harmless the City, and its elected and appointed officials, officers, employees, agents, contractors and consultants from any and all claims, demands, actions, judgments, damages, injuries, losses, lawsuits and liabilities, including court costs, judgments and attorneys' fees, arising from or in any manner connected to: (a) the approval of the Drilling Use Permit; and (b) construction, implementation or operation of the Drilling Project covered by the Drilling Use Permit and any Oil Operations, or activities related thereto.
2. Operator shall be jointly and severally responsible for the investigation, assessment, removal, treatment and remediation (collectively, "Remediation") of any substance, including, but not limited to, petroleum substances and hazardous substances (as defined in 42 U.S.C. Section 9601(14), discharged, dispersed, released, or escaped into soils, water or groundwater from or in connection with any Drilling Project, or the Oil Operations. Such Remediation shall be conducted in full compliance with all applicable City, county, regional, state and federal laws, ordinances, rules, regulations, requirements, directives and orders whatsoever, present or future, and at Operator's sole cost and expense. If Operator fails to take any action required pursuant to this Section, the City may, but shall not be obligated to, take all actions it deems appropriate with respect to the discharged, dispersed, released, or escaped substance. Operator shall reimburse the City for all expenses reasonably incurred in connection with their above described actions including, but not limited to, all direct and indirect costs relating to the Remediation. Operator's obligations under this Section extend to all properties impacted by Operator's Drilling Project, Oil Operations and other activities related thereto.

D. Written Consent Requirement. Prior to the issuance of any Drilling Use Permit, a covenant and agreement, on a form provided by the Community Development Director and in form and substance acceptable to the City Attorney, acknowledging and agreeing to comply with all terms and conditions established herein, shall be signed by the Operator and recorded in the County Recorder's Office. The covenant and agreement shall run with the land and shall be binding on any subsequent owners, and tenants or occupants of the Oil Field. After recordation, a

certified copy bearing the Recorder's number and date shall be provided to the Community Development Director. Such agreement shall include indemnity obligations consistent with the terms set forth in Sections 15.14.040(C)(1) and 15.14.040(C)(2) above.

- E. Costs of Implementing Monitoring and Enforcing Conditions.** The Operator shall be fully responsible for all reasonable costs and expenses incurred by the City or any City contractors, consultants, or employees, in implementing, monitoring, or enforcing this Ordinance, including but not limited to, costs for permitting, permit condition implementation, mitigation monitoring, reviewing and verifying information contained in reports and plans, undertaking studies, research and inspections, administrative support, fire training and equipment, emergency response and including the fully burdened cost of time spent by City employees on such matters. Funds from the Draw-Down Account may be used to pay for such costs.
- F. Penalty for Violation of Conditions.** At the discretion of the Community Development Director, taking into account the nature of the violation, the Operator may be subject to an amount not less than \$1000 or more than \$10,000 per day per violation. A written notice with a description of the associated penalty and required timeframe for addressing the violation will be sent to the Operator in the event of a violation. The penalties set forth in this Section are not exclusive, but shall be in addition to any other remedies available for a violation of the CCMC.
- G. Schedule of Fees.** The City may, from time to time, adopt a schedule of fees to be charged to the Operator for various activities that will be undertaken by the City pursuant to this Ordinance, including, but not limited to, the processing of Comprehensive Drilling Plans, Annual Drilling Plans and Drilling Use Permit applications as set forth in Section 4, Abandonments, review of plans and studies and annual inspections of Well sites and other equipment.
- H. Periodic Review.**
1. The Planning Division shall conduct a comprehensive review of the provisions of this Ordinance at least every five years to determine if the provisions of this Ordinance are adequately protecting the public health, safety, and general welfare. Such reviews shall, among other things, consider whether additional provisions should be added, appended, or removed. A primary goal of the periodic review shall be to evaluate whether proven technological advances that would further reduce impacts of Oil Operations on neighboring land uses should be incorporated into the provisions of this Ordinance.
 2. Each review shall include a report by the Community Development Director, which shall be prepared after public notice and opportunity for public comment. The report shall include a comprehensive analysis of the effectiveness of the provisions of this Ordinance, and shall review and consider enforcement activity, operational records, and any other issues relating to Oil Operations. The report, at the option of the City, may include a survey of the residents near the Oil Field regarding noise, odors, vibrations, and other issues requested by the Community Development Director. A draft of the report shall be provided to

the public, the Operator for review and comment. All comments on the draft report from the public, the Operator shall be submitted to the Community Development Director in writing, and will be considered, if timely received, before the report is finalized. The final report shall include a recommendation as to whether the Community Development Director should prepare proposed amendments to this Ordinance for submission to the City Council.

3. At the discretion of the Community Development Director, reviews of this Ordinance may be conducted more frequently than every five years. Without limiting such discretion, the Community Development Director shall consider whether an early review should be undertaken if more than three material violations occur within any 12-month period.
 4. The initial review shall occur no sooner than three years and no later than five years after the Effective Date, unless the Community Development Director determines that such initial review shall occur at an earlier time pursuant to Subsection 3 above.
- I. **DOGGR Records.** Operator shall provide to Community Development Director copies of all documents submitted to DOGGR regarding the Oil Field.

SECTION 10. CONSTRUCTION AND GRADING PERMITS.

Operator shall be required to obtain the following construction and grading permits:

- A. A construction permit for the erection of any structure on the permitted premises. Plans of the derrick or structure to be erected must be submitted to the City's Building Safety Division prior to a permit being issued.
- B. A grading permit from the Department of Public Works for all grading, except as defined in the Grading Guidelines as adopted by the Los Angeles County Department of Public Works. Grading design and grading plan preparation shall conform to the requirements of the Los Angeles County Grading Guidelines. A site specific geotechnical investigation and hydrologic analysis may be required as described in Sections 15.14.115.B and 15.14.130, respectively.
- C. The permits required by this Ordinance are in addition to any other applicable permits required by the CCMC, including, but not limited to, building, electrical, fire and public works permits.

SECTION 11. OPERATING STANDARDS.

- A. **General.** The drilling, operation and maintenance of any well, and all other operations of the Operator, shall at all times be carried on in a lawful manner, in accordance with modern approved methods and practices, which protect the public health and safety and the environment.

- B. New Technology.** Proven feasible technological improvements which are capable of reducing the environmental impacts of drilling and re-drilling to surrounding uses, shall be promptly implemented to the extent such technology is commercially available. As part of the Annual Drilling Plan, in accordance with Section 31, Operator shall 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. Such technology shall be implemented in connection with wells identified in the Annual Drilling Plan unless Operator demonstrate the technology is not technologically feasible or is not commercially available.
- C. Compliance with Laws and Regulations.** The Operator shall comply with all applicable laws, regulations and standards of any local, state or federal agency related to drilling, re-drilling, reworking and maintenance operations. In the event there are any inconsistencies between any such regulations and the provisions of this Ordinance, the more stringent requirement shall apply.
- D. Nuisance Requirements.** In the event the drilling or any work on the permitted premises is determined by the Community Development Director to be a nuisance as defined in Chapter 9.04 of the CCMC, the City shall provide 18-hours' notice to the Operator that Oil Operations shall be suspended in a safe and controlled manner and such suspension shall continue for a length of time which is reasonable under the circumstances. Notwithstanding the foregoing, the City may require Oil Operations to be suspended immediately in the event that the City determines that such operations are causing an imminent endangerment to public health or safety.
- E. Maintenance of Premises.** Operator shall keep and maintain all of the permitted premises in a clean, healthy and sanitary condition in a manner consistent with the type of operation authorized, and shall fully conform to all requirements of City ordinances and regulations with respect to property maintenance.

SECTION 12. FIRE OPERATING PERMIT, PROTECTION AND EMERGENCY RESPONSE.

- A. Operating Permit.** Operator shall obtain an Annual Operating Permit, in accordance with the California Fire Code.
- B. On Site Fire Equipment.** Fire extinguishing equipment shall comply with all applicable fire and safety regulations, including, but not limited to, NFPA Standards, Industrial Risk Insurers (IRI) guidelines, American Petroleum Institute Industrial Labor Relations and shall be maintained in accordance with the requirements of the Fire Chief.
- C. Fire Training and Equipment.** Operator shall be responsible for costs and expenses incurred by the City, up to \$25,000 annually (to be adjusted annually each July 1st to reflect the increase in the Consumer Price Index for all Urban

Consumers, Los Angeles/Riverside/Orange County Area, as established by the U.S. Department of Labor for the period from March of the preceding year through March of the current year), for training and equipment, including hazardous materials training, oil well fire suppression and spill containment training, and other related specialized training and equipment as requested by the Fire Department. In accordance with the provisions of Section 9.A, the Draw-Down Account shall be used to fund such training and equipment when requested by the Fire Chief and approved by the City's Chief Financial Officer.

D. Fire Prevention Maintenance.

1. The Fire Chief may require the immediate cessation of all operations of the Operator whenever, in his or her judgment, an extraordinary fire hazard exists.
2. The Fire Chief may also require the emptying, transfer, or removal of petroleum and/or flammable materials from any tank or sump to such location as he or she deems advisable while such hazard exists.
3. It shall be unlawful for the Operator to allow flammable liquids or waste materials to flow or remain on the surface of the ground, whether on the permitted premises or any other premises, public or private.
4. It shall be unlawful for any person to smoke or throw a burning object within 25 feet of any derrick, loading rack, tank, or sump containing petroleum or any products thereof, or any flammable liquids.

E. Audit of Fire Fighting Capabilities. The Fire Chief shall require an annual review and audit of fire-fighting capabilities as per the most recent NFPA requirements, California Fire Code, City Fire Code and Regulations, California Code of Regulations and API requirements. Issues addressed shall include, but not be limited to: fire monitor placements, fire-related water capabilities, fire detection capabilities and fire foam requirements. The audit shall also include a list of any current violations on record and a corrective action plan, which shall identify each non-compliance item or other matter to be addressed, describe the corrective action to be taken, and provide a timeline for the completion of each such corrective action. The audit results and corrective action plan shall be submitted to the Fire Chief for approval. The Operator shall submit to the Fire Chief monthly updates on the corrective action plan until such time as all corrective actions have been completed. The Operator shall complete any corrective action within the approved time limits called for in the plan.

F. Spill Containment Response Personnel, Training and Equipment.

1. The Operator shall conduct annual spill containment response training and shall at all times have available onsite sufficiently trained personnel with an adequate amount of properly maintained equipment and/or facilities so that a spill of the entire contents from the largest oil tank on the Oil Field can be responded to and contained immediately to reduce the likelihood that the spill reaches a catch basin. The content of the spill containment response training shall, at a minimum, include training for the recording of spill events (e.g. date

and location of spill, resources deployed to respond, and containment timeframe). The spill containment equipment shall comply with the requirements of the Local California Unified Program Agency and the EPA and be inspected by the Fire Chief to ensure that it will be effective in the event of a spill.

2. This spill containment response training and equipment required by this subsection shall be in place no later than 90 days following the Effective Date or at such later date as may be approved by the Community Development Director in consultation with the Fire Chief, for good cause shown.

G. Emergency Response Plan (ERP). Within 180 days of the Effective Date, the Operator shall submit an ERP to be reviewed and approved or conditionally approved by the Fire Chief. The ERP shall include measures to protect biological species and to revegetate any areas disturbed during an oil spill or clean-up activities (see Section 29, Biological Resources). The Operator shall also ensure that the ERP satisfies all rules and regulations of the EPA, California Code of Regulations, SPCCP, the California Office of Spill Prevention and Response, and the US Department of Transportation relating to onshore pipeline spills. Any modifications to the ERP shall be submitted to the Fire Chief for review and approval. Operator shall fully implement and comply with all provisions of the approved ERP within 30 days following the approval of the ERP or at such later date as may be approved by the Fire Chief, for good cause shown. The Operator shall review and update the plan at least every two years to ensure the ERP is in compliance with this Section.

H. Community Alert Notification System.

1. The Operator shall establish, maintain and test on an annual basis, a proposed Community Alert Notification System for automatic notification of area residents and businesses in the event of an emergency associated with Oil Operations that could require residents or inhabitants to take shelter, evacuate, or take other protective measures. The proposed Community Alert Notification System shall be reviewed and approved by the City's Fire and Police Chiefs.
2. The Community Alert Notification System required by this subsection shall be in place no later than 90 days following the Effective Date or at such later date as may be approved by the City's Fire and Police Chiefs, for good cause shown.

I. Annual Emergency Response Drills. Annual Emergency Response Drills shall include the Culver City and Los Angeles County Fire Departments. The Operator shall demonstrate the effectiveness of the Emergency Response Plan (ERP) by responding to one planned emergency response drill per year which shall be conducted in conjunction with the Culver City and Los Angeles County Fire Department. Emergency response drills required by other agencies that involve Culver City and Los Angeles County Fire Departments can be used to satisfy this provision. In addition, the Operator shall demonstrate the effectiveness of the ERP by responding to not more than two unannounced drills each year, which may be called by the Fire Chief at the Oil Field. If critical operations are then underway at

the Oil Field, the Operator need not respond to an unannounced drill to the extent such a response would, as a result of such critical operations, create an undue risk of personal injury or property damage, but in such case, the Operator must promptly explain the nature of the critical operations, why response is not possible, and when the critical operations will be completed.

- J. Site Assessment.** In the event of a spill, leak or discharge from a tank system, a site assessment shall be completed and submitted to the Fire Chief within 60 days of the spill leak or discharge, in accordance with the requirements of the California Fire Code.

SECTION 13. SUMPS AND RESERVOIRS.

- A.** It shall be unlawful for any person, firm or corporation to construct or cause to be constructed, to use or cause to be used, or to maintain or cause to be maintained, any permanent sump or reservoir hereafter constructed or erected, for the purpose of storing petroleum or flammable liquids, unless such sump is constructed as follows:
1. All earth sumps maintaining a fluid level more than one foot above the natural ground level at the lowest point shall have the inner sides entirely lined with not less than three inches of concrete or masonry construction;
 2. The earth-filled walls of such sumps or reservoirs shall be constructed in such manner as will meet the requirements of the Public Works Director/City Engineer;
 3. The level of the fluid of such sumps or reservoirs shall not be allowed or permitted or suffered, regardless of cause thereof, to rise above a point 12 inches below the lowest top point of the enclosing walls of each sump or reservoir, and such point shall be marked with a gauge or marker at least four inches square, located at a point accessible for gauging, and the top of such gauge shall not be below the top of each sump or reservoir; and
 4. Temporary sumps may be constructed, maintained and used during the period of drilling a well for the normal purposes of mud usage or storage, walls of which shall be of substantial earth construction, and the fluid level of which shall not be allowed to rise above a point six inches from the top.
- B.** The construction of all sumps or reservoirs shall meet the requirements of the Building Official.
- C.** It shall be unlawful for any person, firm or corporation to set fire to, or to burn, or to cause or permit any other person to set fire to or to burn, any petroleum or liquid with petroleum contents in any sump hole, open pool or reservoir, or to permit oil so situated on premises belonging to such, person, firm or corporation, to be burned.
- D.** All sumps that are used, installed, or maintained for use in connection with any well, and which have not been used for 90 days for the operation of the drilling, redrilling,

reworking or maintenance of such well or any other well in the vicinity, shall be cleaned out, and all oil, rotary mud, and rubbish removed.

- E. Each sump of any depth shall have a fence erected and continuously maintained that encloses the sump. This provision shall not apply to sumps that are attended at all times while drilling, redrilling, reworking and maintenance operations.

SECTION 14. MAJOR FACILITIES PROHIBITED.

No Major Facilities shall be constructed within the City of Culver City. Construction activities shall be limited to those necessary for new production and injection wells and associated equipment (tanks, pipes, piping components, etc.) that are needed to support access to such wells and equipment, or as needed for emergency construction activities, such as repairs after earthquakes, floods, or landslides or other catastrophic events.

SECTION 15. TANKS.

A. API Standards. All tanks and appurtenances shall be constructed in accordance with the API Standard Nos. 12-B, 12-D, 12-F, API 650, API 620 and as amended, and in accordance with current Fire Code, DOGGR, California Division of Industrial Safety, EPA Standards, applicable provisions of Title 14 of the California Code of Regulations Section 1774, and applicable CalARP Program requirements.

1. The provisions of this Section shall not apply to drums constructed in accordance with the regulations of the Interstate Commerce Commission.
2. The venting provisions shall not apply to any container of 110 gallons capacity or less; providing, however, that whenever it is essential for fire safety, vents shall be maintained on containers which are permanently installed.
3. No unroofed tanks shall be used.

B. Compliance with California Fire Code. Above ground tanks shall be installed and maintained in accordance with the provisions of the California Fire Code and other applicable regulations, including foam fire protection systems when required by the Fire Chief.

C. Vapor Recovery. Oil, wash, and produced water tanks shall be vapor tight and shall be equipped with a vapor recovery system.

D. Tank Piping, Valves, Fittings, and Connections. All new tank piping, valves, fittings, and connections including normal and emergency relief venting, shall be installed and maintained in accordance with current API standards to the satisfaction of SCAQMD and DOGGR.

E. Leak Detection and Control Plan. Within 180 days of the Effective Date, or at such later date as may be approved by the City's Fire Chief, for good cause shown,

the Operator shall design, implement, and comply with a Leak Detection and Control Plan, to be submitted to and approved by the Fire Chief, for controlling and detecting tank bottom leaks on all existing and new tanks. The Operator may use a combination of methods including but not limited to diversion walls, dikes, tank foundations of concrete or gravel, and a tank bottom leak detection system in compliance with Title 14 of the California Code of Regulations Section 1773, or subsequently enacted state regulations regarding tank bottom leaks. The Operator shall document its approach for identifying, monitoring, and correcting tank leaks and submit this information to the Community Development Director and Fire Chief as specified in the Drilling Use Permit.

- F. Baseline Inspection.** Prior to the operation of a newly constructed tank(s), an internal inspection of the tank(s) shall be conducted by the Fire Chief to establish baseline.
- G. Dikes and Walls Surrounding Storage Tanks.** The Operator, shall construct and maintain dikes or walls around all storage tanks, clarifying tanks, or tanks used in connection with the production of oil. Dikes and walls shall be constructed and maintained to meet the standards of the NFPA and current DOGGR requirements. (See also Section 18, Dikes and Retaining Walls, and Section 20, Safety and Risk of Upset)
- H. Pressure Monitoring and Venting.** See Section 21.E.

SECTION 16. LOCATION OF TANKS.

- A.** Oil storage shall be limited to a maximum of 5,000 barrels for each producing Well. A single tank shall not exceed 5,000 barrels in capacity.
- B.** Storage tanks shall be located in conformity with the following table and as per NFPA 30 requirement, whichever is more stringent, with measurements to be taken from the shell of the tank. Where the configuration of the property will not permit the spacing requirements as identified on the following table, deviations from such requirement may be made on the written approval of the City’s Community Development Director, Building Official and Fire Chief.

Tank Capacity in 42-Gallon Barrels	Distance from Nearest Tank
1 to 266	2 feet
267 to 720	3 feet
721 to 1,600	5 feet
1,601 to 2,854	6 feet
2,855 to 5,000	7 feet

- C.** No activity that creates an open flame shall be conducted within 100 feet of a storage tank containing flammable liquids. Where the area under ownership or

control of the person, firm or corporation proposing to install or maintain any such tank does not permit the 100 foot spacing, as specified above, the location of any such tank shall be designated by the Building Official and Fire Chief except that in no case shall the distance between any tank containing petroleum or any products, or any flammable liquids and a steam boiler or open flame be less than 25 feet.

- D. No new storage tank shall be constructed closer than 500 feet from any Developed Area, or closer than 200 feet from a public road. No building shall be constructed within 50 feet of any oil storage tank. Whenever feasible, new tanks will be located such that they are not visible from residences, parks or other public areas. No tanks will be placed on ridgelines.

SECTION 17. PIPING AND ELECTRICAL EQUIPMENT.

- A. The Operator shall maintain and implement a Pipeline Management Plan that complies with the California Fire Code and DOGGR regulations.
- B. All pipe and pipe fittings, including valves, gauge glass fittings, and other similar appurtenances used in connection with any derrick, loading rack or tank, shall be designed, installed and maintained to safely withstand the pressure to which they may be subjected.
 - 1. All valves directly controlling the flow of flammable liquids from tanks shall be of the rising stem or self-indicating type, or other type commonly used in Oil Operations, which is equally adequate or efficient. This provision shall not apply to valves less than two inches in diameter.
 - 2. Gauge glass fittings for tanks and for containers, sample cocks and other similar fittings intended or used for the purpose of drawing off flammable liquids from tanks and/or containers, in any quantity shall be constructed of some metal having a melting point equal to steel or higher. Brass fittings shall not be used.
 - 3. Gauge glass fittings shall be equipped with automatic ball checks.
- C. Any system of piping connected to a positive acting pump shall be equipped with an automatic pressure relief valve or suitable means to relieve the pressure of any such system and prohibit such pressure from exceeding 125% of the normal safe working pressure of the piping system or pump, whichever is the lower pressure.
- D. All electrical equipment proposed to be used or used in connection with any permit issued hereunder shall conform to the State Electrical Safety Orders of the Industrial Accident Commission, current California Electrical Code and DOGGR regulations.
- E. See also Section 20.E.2, Secondary Containment.

SECTION 18. DIKES AND RETAINING WALLS.

- A.** It shall be unlawful for any person to use or cause to be used, or to maintain or cause to be maintained, any surface storage tank or containers located outside of any building, and in which flammable liquids, petroleum or its liquid byproducts, or liquefied petroleum gases are, or may be, placed or stored, unless such surface storage tank or container is surrounded by masonry or reinforced concrete walls, or dikes, so designed, constructed and maintained as to confine at least 110 percent capacity of the largest tank or container within such masonry or reinforced concrete walls or dikes consistent with NFPA 30 requirements.
1. Such walls or dikes shall be increased for each additional tank or container of smaller capacity located within the same vicinity by 10% of the capacity of such additional tank or container.
 2. Such walls or dikes shall not be required for tanks of less than 2,000 gallons capacity, except where in the opinion of the Fire Chief and Public Works Director/City Engineer a hazardous condition exists.
- B.** Any surface storage tank or container located inside of any building and in which flammable liquids are, or may be, placed or stored shall be surrounded by masonry or reinforced concrete walls or dikes so designed, constructed, and maintained as to confine the total capacity of all such tanks or containers within such masonry or reinforced concrete walls or dikes.
- C.** See also Section 20.E, Secondary Containment.

SECTION 19. TOILET AND WASH FACILITIES.

The Operator shall be required to provide a portable toilet for temporary employees on the permitted premises, within 200 feet of the derrick. Sanitary toilet and washing facilities shall be installed at any site where personnel are permanently stationed. Temporary and permanent facilities shall be maintained in a clean and sanitary condition at all times.

SECTION 20. SAFETY AND RISK OF UPSET.

The Operator shall at all times conduct Oil Operations in a manner that minimizes risk of accidents and the release of hazardous materials in accordance with the best available technology and safety devices for the prevention of accidents. Operator shall give written notice to the Fire Chief and Community Development Director, as well as all other required authorities, of any and all accidents occurring as a result of Oil Operations or on the Oil Field site, within two working days of the accident. Failure to provide the required notice may result in revocation of the Drilling Use Permit in accordance with the provisions of Section 8. The Operator shall comply with the following provisions:

- A. Blowout Prevention.** Operator shall not drill a well without equipping such well with adequate blow out prevention equipment, installed and maintained as required by DOGGR and with all safety orders of the State Division of Industrial Safety for drilling and production. Upon cementing of the surface string of casing and prior to drilling out the shoe of said string, blowout prevention equipment, tested and approved by DOGGR, shall be installed in accordance with the most current DOGGR requirements. Such equipment shall be capable of being operated from the driller's station and from another remote station. Redrilling, reworking and maintenance operations shall be equipped with blowout prevention equipment at the onset of operations in accordance with the most recent requirements of DOGGR. Blowout prevention equipment shall be maintained in good condition and shall be required to be tested at intervals as requested by DOGGR. Blowout prevention flanges and kill valves at the casing head shall be kept free of fluids to allow for routine inspection at any time.
- B. Well Casings.** Operator shall equip the well with casings of sufficient strength and with safety devices in accordance with DOGGR requirements.
- C. Safety Precautions.** The Operator shall comply with all of the current safety precautions required by any State agency or the City.
- D. Belt Guards.** Belt guards shall be required over all drive belts on drilling, redrilling, reworking and maintenance equipment. Guarding shall be in compliance with Title 8 of the California Code of Regulations, Section 6622, or as may be subsequently amended.
- E. Secondary Containment for Oil.** The Operator shall ensure that all existing oil tanks and all new tanks have secondary containment (berms and/or walls) that can contain at least 110 percent of the largest oil tank volume for as long as necessary to respond and clean up a tank spill, in order to reduce the likelihood of oil spills entering the retention basins. In the event the Public Works Director/City Engineer determines that it would be infeasible to provide 110 percent containment for a particular existing oil tank, the Operator shall provide containment at a level determined by the Public Works Director/City Engineer to be feasible.
1. All retention basins in the Oil Field or proposed basins shall be adequately sized, and maintained to handle a 100-year storm event plus a potential spill of the volume of the largest tank that would drain into each basin consistent with NFPA 30 requirements.
 2. All above ground piping in the Oil Field that contains or could contain oil shall be protected by basins or secondary containment measures (berms and/or walls). All new piping shall be above ground and shall have alarm sensors or another comparable system for immediately detecting leaks. All above ground piping shall be visually inspected for leaks on a daily basis. All existing underground piping shall be tested for leaks on an annual basis. Any pipes found to be leaking shall be promptly replaced with new piping meeting the requirements of this Ordinance.

- F. Basins.** All retention basins used in Oil Operations shall be adequately sited, inspected, maintained and operated to the satisfaction of the Public Works Director/City Engineer. The Operator shall demonstrate to the satisfaction of the Public Works Director/City Engineer that the retention basins in the Oil Field satisfy the 100-year storm event requirements of Subsection E.1.

SECTION 21. AIR QUALITY, PUBLIC HEALTH AND CLIMATE CHANGE.

The Operator shall at all times conduct Oil Operations in accordance with the best available technology, safety devices and measures for the prevention of the release, escape, or emission of dangerous, hazardous, harmful and/or noxious gases, vapors, odors, or substances, greenhouse gases, and shall comply with the following provisions:

- A. Emission Offsets.** The Operator shall obtain emission offsets or RECLAIM credits as defined and required by SCAQMD Regulations for all new or modified emission sources that require a new or modified SCAQMD permit. Proof of SCAQMD review and approval shall be submitted to the Community Development Director.
- B. Odor Minimization Plan.** Operator shall submit an Odor Minimization Plan to be reviewed and approved or conditionally approved by the Community Development Director. The Community Development Director may consult with the SCAQMD as needed in its review of the Plan. The Plan shall be designed to ensure public health and safety, provide detailed information about the Drilling Project(s), Oil Field and Oil Operations; specify the number, type and location of monitors that will be used; provide detailed information concerning the reliability of the instrumentation, frequency of calibration and other similar information; and address all issues relating to odors from Oil Operations. Matters addressed within the plan shall include setbacks, signs with contact information, logs of odor complaints, method of controlling odors such as flaring and odor suppressants, and the protocol for handling odor complaints. The Plan shall be reviewed by the Operator on an annual basis to determine if modifications to the Plan are required and report findings to the Community Development Director. Such findings and proposed modifications to the Plan shall be submitted to the Community Development Director for review and approval. Operator shall comply with all provisions of the approved Plan.
- C. Air Monitoring.**
- 1. Plan.** Operator shall submit an Air Monitoring Plan to be reviewed and approved or conditionally approved by the Community Development Director. The Air Monitoring Plan shall include any measure requested by the Community Development Director. The Plan shall be designed to ensure public health and safety through the reduction in air toxics and odorous emissions and reduce greenhouse gas emissions from Oil Operations. The Plan shall also specify the number, type and location of monitors that will be used, and provide detailed information concerning the reliability of the instrumentation, frequency

of calibration and other similar information. The Air Monitoring Plan shall also be designed to assess the risk of both acute and chronic exposure to air contaminants from Oil Operations within the Oil Field, and endeavor to determine and distinguish the source of emissions, to the extent feasible, using available and affordable monitoring technology. Additionally, air monitoring may also be required, as requested by the Community Development Director, along the Outer Boundary of the Oil Field to assess the risk of both acute and chronic exposure to air contaminants from Oil Operations in the portion of the Inglewood Oil Field under the jurisdiction of Los Angeles County. During drilling, re-drilling, reworking or maintenance operations, the Operator shall monitor for hydrogen sulfide and total hydrocarbon vapors as specified in the approved Plan. Hydrogen sulfide shall also be monitored using mobile monitoring equipment in response to odor complaints or when onsite odors are encountered by operating personnel. Total hydrocarbon vapors shall be monitored, so as to exceed the requirements of SCAQMD Rule 1173, using mobile monitoring equipment at locations surrounding the wells, tanks, piping, piping components, etc. at the locations and frequencies, no less frequent than quarterly, that shall be specified in the approved Plan. The approved monitors shall provide automatic alarms that are triggered by the detection of hydrogen sulfide or total hydrocarbon vapors at levels designated in the approved Plan. For drilling, re-drilling, reworking or maintenance monitors, the alarms shall be audible and/or visible to the person operating the drilling, re-drilling, reworking or maintenance equipment. When specified alarm levels are reached, the following actions shall be taken:

- a.** At a hydrogen sulfide concentration of equal to or greater than one part per million but less than 10 parts per million, the Operator shall, immediately, and not later than 30 minutes after the alarm, investigate the source of the hydrogen sulfide emissions and take immediate corrective action to eliminate the source. The corrective action taken shall be documented in the drilling, re-drilling, reworking and maintenance log, or applicable inspection and maintenance logs. If the concentration is not reduced to less than one part per million within 30 minutes of the first occurrence of such concentration, the Operator shall shut down the drilling, re-drilling, reworking or operations or other source in a safe and controlled manner, until the source of the hydrogen sulfide emissions has been eliminated, unless shutdown creates a health and safety hazard.
- b.** At a hydrogen sulfide concentration equal to or greater than 10 parts per million, the Operator shall immediately commence the shutdown of the drilling, re-drilling, or reworking operations or other source in a safe and controlled manner until the source of the hydrogen sulfide emissions has been eliminated, unless shutdown creates a health and safety hazard. The corrective action taken shall be documented in the drilling, re-drilling, or reworking log, or applicable inspection and maintenance logs. When an alarm is received, the Operator shall immediately notify, and provide access and the right to investigate the event as necessary to all agencies

with jurisdiction over the Oil Field, including, but not limited to, the Culver City Fire Department, the Los Angeles County Fire Department - Health Hazardous Materials Division, DOGGR, and SCAQMD.

- c. At a total hydrocarbon concentration equal to or greater than 500 parts per million but less than 1,000 parts per million, the Operator shall immediately investigate the source of the hydrocarbon emissions and take immediate corrective action to eliminate the source. The corrective action taken shall be documented in the drilling, redrilling, reworking or maintenance log, or applicable inspection and maintenance logs. If the concentration is not reduced to less than 500 parts per million within 30 minutes of the first occurrence of such concentration, the Operator shall shut down the drilling, redrilling, reworking or maintenance in a safe and controlled manner, until the source of the hydrocarbon emissions has been eliminated, unless shutdown creates a health and safety hazard.
 - d. At a total hydrocarbon concentration equal to or greater than 1,000 parts per million, the Operator shall immediately commence the shutdown of the drilling, redrilling, reworking or maintenance operations, or other source, in a safe and controlled manner, until the source of the hydrocarbon emissions has been eliminated, unless shutdown creates a health and safety hazard. The corrective action taken shall be documented in the drilling, redrilling, reworking or maintenance log, or applicable inspection and maintenance logs. When an alarm is received, the Operator shall immediately notify and provide access and the right to investigate the event as necessary to all agencies with jurisdiction over the Oil Field, including; the Culver City Fire Department, the Los Angeles County Fire Department - Health Hazardous Materials Division, DOGGR, and SCAQMD.
 - e. The Operator shall keep a record of the levels of total hydrocarbons and hydrogen sulfide detected at each of the monitors, which shall be retained for at least five years. The Operator shall notify the Fire Chief within 48 hours in the event of the occurrence of any hydrogen sulfide concentration of one part per million or more, or any total hydrocarbon concentration of 500 parts per million or more. At the request of the Fire Chief, the Operator shall make available the retained records from the monitoring equipment.
2. **City Testing.** In the event of a gas release in the Oil Field or in response to complaints received regarding odors in the Oil Field, the City may take grab samples of the air to test for airborne toxins including hydrogen sulfide. The Operator shall be required to pay for all of the City's cost to sample the air including, without limitation, the costs to obtain vacuum canisters and teflar bags for air sampling, the costs to contract with a local laboratory to pick up the canisters and teflar bags immediately after sampling takes place and transport the samples to a laboratory for immediate analysis as required to obtain a valid and accurate test of the air and report for the presence and concentration of airborne toxins. The Operator shall also be responsible for the costs for City

personnel to be trained in the proper techniques for conducting the air sampling.

- D. Portable Flare for Drilling.** To reduce air toxics emissions, odorous substances emissions, and greenhouse gas emissions, the Operator shall have a gas buster and a portable flare, approved by SCAQMD, at the Oil Field and available for immediate use to remove any gas encountered during drilling operations from drilling muds prior to the muds being sent to the shaker table, and to direct such gas to the portable flare for combustion. The portable flare shall record the volume of gas that is burned in the flare. The volume of gas burned in the flare shall be documented in the drilling log. The Operator shall notify the Fire Chief and SCAQMD within 48 hours in the event gas is burned by the flare, and shall specify the volume of gas that was burned in the flare. No drilling or redrilling shall be conducted in areas that are known to penetrate the Nodular Shale zone, or where pressurized methane is known or reasonably suspected to exist, unless a fully operational and properly maintained gas buster and portable flare are installed on the rig. All other drilling and redrilling operations shall be conducted so that any measurable gas that is encountered can, and will, be retained in the well bore until the gas buster and portable flare are installed on the rig, after which the gas will be run through the system. The Operator shall immediately notify the Fire Chief and SCAQMD in the event any gas from drilling or redrilling operations is released into the atmosphere without being directed to and burned in the flare.
- E. Oil Tank Pressure Monitoring and Venting.** All oil tanks that contain or could contain oil shall have a fully operational pressure monitoring system, of a type and design approved by the Fire Chief that continuously measures and digitally records the pressure in the vapor space of each tank. The detection system shall notify the Operator via an alarm when the pressure in the tank reaches within 10 percent of the tank relief pressure, and a proximity switch shall be installed at the tank relief outlet (vent) to alarm and notify the Operator if any release occurs. In the event of an alarm, the Operator shall immediately take corrective action to reduce the tank pressure. The corrective action shall be documented in the applicable inspection and maintenance log. The Operator shall notify the Fire Chief and SCAQMD within 24 hours if the pressure in any tank covered by this Subsection ever exceeds such tank's relief pressure or if the hatches on the tank(s) have lifted and allowed gas to vent to atmosphere. Within seven calendar days after any tank vapor release, the Operator shall submit a report of the incident to SCAQMD as a breakdown event pursuant to Rule 430, and shall provide the Fire Chief with a written report of the event and the corrective measures undertaken and to be undertaken to avoid future oil tank vapor releases. The Operator shall make any changes to such report that may be required to obtain approval from the Fire Chief and SCAQMD, shall promptly institute all corrective measures called for by the report, and shall report the completion of the corrective measures to the Fire Chief and the Community Development Director within one week of their completion.
- F. Odor Suppressant for Drilling and Redrilling Operations.** The Operator shall use an odor suppressant spray system on the mud shaker tables for all drilling and redrilling operations to ensure that no odors from such operations can be detected

at the Outer Boundary of the Oil Field. In addition, a proximity switch shall be installed at the tank relief outlet (vent) to alarm and notify the Operator if any release occurs. The odor suppressant used shall be approved by the Community Development Director and shall suppress rather than mask odors.

G. Closed Systems for Produced Oil and Water. The Operator shall ensure all produced water and oil associated with production, processing, and storage, except produced water and oil used for sampling only, are contained within closed systems, as defined in the current California Fire Code, at all times.

H. Off-Road Diesel Construction Equipment Engines. All off-road diesel construction equipment shall comply with the following provisions:

1. 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.
2. Utilize a CARB Verified Level 3 diesel catalyst. The catalyst shall be capable of achieving an 85 percent reduction for diesel particulate matter. Copies of the CARB verification shall be provided to the Community Development Director. Said catalysts shall be properly maintained and operational at all times when the diesel engines are running. CARB Verified Level 3 catalysts are not required for engines that meet Tier 4 standards.

I. Drill Rig Engines. All drilling, redrilling, reworking and maintenance rig diesel engines shall comply with the following provisions:

1. Utilize CARB/EPA Certification Tier 2 or better certified engines or other methods approved by CARB as meeting or exceeding the Tier 2 standard.
2. Utilize second generation heavy duty diesel catalysts capable of achieving 90 percent reductions for hydrocarbons and for particulate matter smaller than 10 microns. Said catalysts shall be properly maintained and operational at all times when the diesel engines are running.
3. Utilize natural gas-powered drill rigs or other engine technologies that are capable of reducing environmental impacts in comparison to the requirements set forth in Subsections 15.14.100.I.1 and 15.14.100.I.2, hereinabove, when such technologies have been determined to be feasible and commercially available through a Clean Technology Assessment in the Annual Drilling Plan.

J. Drilling and Redrilling Setbacks. The following setbacks shall apply within the Oil Field for drilling or redrilling:

1. **Drilling.**
 - a. At least 400 feet from Developed Areas.
 - b. At least 75 feet from any public roadway.

- c. The well hole setbacks prescribed in this subsection may be reduced at the discretion and approval of the Community Development Director if it can be determined the setback reduction will not be detrimental to public health, safety or general welfare.
 - d. As part of the Consolidation and Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan (Section 31.B) the Operator shall provide an inventory of existing wells that encroach into the setback area specified above. Said inventory shall also include a schedule for properly abandoning the wells encroaching into the setback area, based upon their respective current productive life without redrilling.
 - 2. **Slant Drilling.** The Operator shall employ slant drilling whenever feasible to do so in order to locate the Top Hole as far from Sensitive Developed Areas as may be reasonably necessary to mitigate impacts.
 - a. **Deep-Zone Wells.** If the Operator intends to drill Deep-Zone Wells where the Top Hole is closer than 800 feet to a Sensitive Developed Area then the Operator shall prepare and receive approval for a Deep-Zone Supplement to the Annual Drilling Plan, as required by Section 31.C.
 - b. **Mid-Zone Wells.** If an Operator intends to drill Mid-Zone Wells where the Top Hole is closer than 800 feet to a Sensitive Developed Area then the Operator shall prepare and receive approval for a Mid-Zone Supplement to the Annual Drilling Plan, as required by described in Section 31.C.
- K. **Fugitive Dust Control Plan.** Within 120 days following the Effective Date, or at such later date as may be approved by the Public Works Director/City Engineer for good cause shown, Operator shall submit a Fugitive Dust Control Plan to the Public Works Director/City Engineer for review. The plan shall comply with all requirements of SCAQMD Rule 403 and shall cover all existing operations and any future projects that may or may not require a grading permit. The Operator shall review the plan every five years and incorporate any modifications deemed necessary due to amendments to SCAQMD Rule 403 or as required by the City. Any revisions to the Fugitive Dust Control Plan shall be reviewed and approved by the Public Works Director/City Engineer. The plan shall include consideration of the following measures, other measures listed in SCAQMD Rule 403, Tables 1 through 3, and other measures at the discretion of the Public Works Director/City Engineer.
 - 1. Application of water at least every four hours, or more frequently if conditions so require, to the area within 100 feet of a structure being demolished, to reduce vehicle trackout, and to other actively disturbed areas within a construction site;
 - 2. Application of CARB-precertified, or equivalently effective, non-toxic soil binders to disturbed areas upon completion of demolition;
 - 3. Application of water to disturbed soils after demolition is completed or at the end of each day of cleanup;

4. Prohibition against demolition activities when wind speeds exceed 25 mph;
5. Requirement of minimum soil moisture of 12% for earthmoving by use of a moveable sprinkler system or a water truck. Moisture content can be verified by lab sample or moisture probe;
6. Requirement that 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;
7. When backfilling, mix backfill soil with water prior to moving, dedicate water truck or high capacity hose to equipment, minimize drop height from loader bucket and empty loader bucket slowly;
8. Requirement of paved interior roads to be at least 100 feet long, 12 feet wide per lane and edged by rock berm or row of stakes, or addition of four-foot shoulder for paved roads;
9. Limit vehicular traffic to established paved and unpaved roads and parking areas;
10. Requirement that maximum speed on unpaved roads be limited to 15 miles per hour;
11. Implementation of watering three times a day for active unpaved roads, or more often as necessary to ensure that no visible emissions occur during unpaved road travels. As an alternative to watering, unpaved roads may be treated with CARB-precertified, or equivalently effective, non-toxic soil binders in a manner and at a frequency based on manufacturer recommendations;
12. Application of CARB-precertified, or equivalently effective, non-toxic soil binders annually to unpaved parking areas;
13. Application of CARB-precertified, or equivalently effective, non-toxic soil binders, or daily watering, or installation of temporary coverings to storage piles;
14. Application of CARB-precertified, or equivalently effective, non-toxic soil binders on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days);
15. Planting of tree windbreaks, consistent with the approved Landscaping Plan, on the windward perimeter of construction projects if adjacent to open land;
16. Planting of vegetative ground cover in disturbed areas, consistent with the approved Landscaping Plan, as soon as possible;
17. Installation of a track-out control device to reduce mud/dirt track out from unpaved truck exit routes that exit onto City streets, that may be any or a combination of the three following options: (a) wheel washers where vehicles enter and exit unpaved areas onto paved roads, or requirement to wash off trucks and any equipment leaving the site each trip; (b) pipe-grid track-out-control device; or (c) installation of gravel bed track-out apron (three inches

deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes). Additionally, any visible track-out onto City streets caused by Oil Operations will be swept using water-based sweepers at least once a day; and

18. Limit construction projects or schedule them to the extent possible so that they are not concurrent to prevent grading at multiple locations within the Oil Field.
- L. **Inspection and Maintenance Program Information.** Upon request, the Operator shall make available for inspection by City staff all required SCAQMD, CARB, and EPA inspection and maintenance program records. This requirement applies to all sites subject to SCAQMD, CARB, and EPA inspection and maintenance programs within City limits.
- M. **Greenhouse Gas Recordkeeping and Cap and Trade Program Information.** Upon request, the Operator shall make available for inspection by City staff all required CARB and EPA greenhouse gas inventories and inventory verifications that include emission from activities within the Oil Field, and CARB Cap and Trade program compliance documentation.

SECTION 22. NOISE ATTENUATION.

All Oil Operations shall be conducted in a manner that implements and is consistent with the best available measures for the prevention of excessive, annoying or unusual noise, and shall comply with the following provisions:

A. Noise Limits.

1. All Oil Operations on the Oil Field shall comply with the noise provisions of the CCMC Title 9, Chapter 9.07 (Noise Regulations). In the event there are any inconsistencies between Chapter 9.07 and the provisions of this Ordinance, this Ordinance shall take precedence for Oil Operations.
2. Hourly, A-weighted equivalent noise levels associated with well drilling, redrilling, reworking and maintenance shall not elevate existing baseline levels by more than five dBA during daytime hours (7:00 am to 10:00 pm).
3. Operator shall limit the night time (10:00 p.m. to 7:00 a.m.) noise levels at any sensitive receptor to no more than three dBA above a one-hour baseline average for the defined nighttime period. If Operator violates the above noise requirements, Operator shall identify the source of the noise and take steps necessary to assure compliance with this subsection.
4. If well drilling, redrilling, reworking and maintenance operations elevate nighttime baseline noise levels by more than 10dBA for more than 15 minutes in any one hour, as independently verified and determined by the City, the Operator, in consultation with the City, shall identify the cause and source of the noise and takes steps to avoid such extended periods of noise elevation in the future.

5. Noise produced by Oil Operations shall include no pure tones when measured beyond the Outer Boundary or, for other locations, as determined by the Public Works Director/City Engineer.
- B. Backup Alarms.** Backup alarms on all vehicles operating within the Oil Field shall be disabled between the hours of 8:00 p.m. and 8:00 a.m. During periods when the backup alarms are disabled, the Operator shall employ alternate, low-noise methods for ensuring worker safety during vehicle backup, such as the use of spotters.
- C. Quiet Mode Drilling Plan.** All Drilling Projects shall include the preparation and approval of a Quiet Mode Drilling Plan that would apply between the hours of 6:00 p.m. and 8:00 a.m. The Plan shall be submitted at the time of application or at such later date as may be approved by the Community Development Director, for good cause shown. All Oil Operations shall be conducted in conformity with the Plan that has been reviewed and approved by the Community Development Director. The Plan shall be reviewed by the Operator on an annual basis to determine if modifications to the Plan are required and report findings to the Community Development Director. Such findings and the modified Plan shall be submitted to the Community Development Director for review and approval. Operator shall comply with all provisions of the approved Plan. The Plan shall include, but is not limited to the following:
1. Installation of noise barriers.
 2. Derrick personnel shall take particular care when standing back while tripping out of hole to ensure that there is minimal clanging of pipe.
 3. While tripping in the hole, steps shall be taken to ensure that the blocks are completely stopped prior to latching the elevators.
 4. Whenever latching the elevators, personnel shall lay the pipe in the elevators and latch slowly and as quietly as possible.
 5. When picking up drill pipe or casing personnel shall use the high line, and try to prevent hitting the pipe against the cat walk and v-door.
 6. Rubber shall be required on the v-door when picking up pipe.
 7. Personnel shall place rubber or wood on the catwalk when rolling pipe off the pipe racks onto the catwalk.
 8. Steps shall be taken to minimize any banging of pipe on the catwalk by careful use of the forklift.
 9. Hammering on or racking of pipe shall be not permitted.
 10. Operation of the well cellar pump shall not be permitted.
 11. Yelling to other on-location personnel shall not be permitted. Derrick personnel and the driller shall communicate with walkie talkies.

12. Horns shall not be used to give signals.
13. Any other additional information required by the Community Development Director.
- D. Engines.** Critical grade or better exhaust muffler systems shall be used to reduce noise from diesel drilling rig engines. All other equipment powered by internal combustion engines shall use residential grade or better exhaust muffler systems to reduce noise.
- E. Equipment Servicing.** All noise producing Oil Field equipment shall be regularly serviced and repaired to minimize increases in pure tones and other offensive noise output over time and to ensure that tonal and other offensive noise from worn bearings, metal-on-metal contact, valves and other equipment does not cause perceptible tonal or other offensive noise at the Outer Boundary or any neighboring property. The Operator shall maintain an equipment service log for all noise-producing equipment, which shall be subject to inspection by the City.
- F. Deliveries.**
1. Except as provided in Section 22.E.2, deliveries shall not be permitted after 8:00 p.m. and before 7:00 a.m. except in cases of emergency. Deliveries on Sundays or legal holidays shall not be permitted after 8:00 p.m. and before 9:00 a.m., except in cases of emergency.
 2. Deliveries within 500 feet of any residential property shall not be permitted after 5:00 p.m. and before 7:00 a.m. except in cases of emergency. Deliveries on Sundays or legal holidays shall not be permitted after 5:00 p.m. and before 9:00 a.m., except in cases of emergency or as approved by the Community Development Director.
- G. Time Limits for Construction.** Construction of permanent structures shall not be permitted after 7:00 p.m. and before 7:00 a.m., or during Saturdays, Sundays, or legal holidays, except in cases of emergency or as approved by the Community Development Director.
- H. Construction Equipment.** All construction equipment shall be selected for low-noise output. All construction equipment powered by internal combustion engines shall be properly muffled and maintained. The Operator shall maintain an equipment service log subject to inspection by the Public Works Director/City Engineer.
- I. Construction Equipment Idling.** Unnecessary idling of construction equipment internal combustion engines is prohibited.
- J. Worker Notification.** The Operator shall instruct employees and subcontractors about the noise provisions of these regulations prior to commencement of each and every drilling, redrilling, reworking, construction and maintenance operation, and shall annually certify to the Public Works Director/City Engineer that such employees and subcontractors have been properly trained to comply with such

noise provisions. The Operator shall prominently post quiet mode policies at every drilling and redrilling site.

- K. Monitoring.** The Operator shall employ an independent qualified acoustical engineer, approved by the Public Works Director/City Engineer to install equipment to continuously monitor and digitally record noise levels at and near the Oil Field or Drilling Project location. Such monitors shall be placed at locations and for the frequency and duration identified by the Public Works Director/City Engineer, and shall include adjacent sensitive receptor locations and at locations where complaints were received regarding Drilling Project activities. The results of all monitoring shall be submitted to the Public Works Director/City Engineer on a quarterly basis. The monitoring required by this subsection shall be implemented no later than 180 days following the Effective Date or at such later date as may be approved by the Public Works Director/City Engineer, for good cause shown.

SECTION 23. VIBRATION REDUCTION.

All Oil Operations shall be conducted in a manner that minimizes vibration, and shall comply with the following provisions:

- A.** Vibration levels from Oil Operations shall not exceed a velocity of 0.25 mm/s over the frequency range 1 to 100 Hz at the Outer Boundary.
- B.** Should vibration levels at any time exceed the thresholds specified above, or should the Operator otherwise fail to comply with all of the provisions specified herein, the Operator shall immediately notify the City and shut down the source of drilling and redrilling found to be in non-compliance with the thresholds specified in this Ordinance, and no new drilling or redrilling activities may be commenced or approved until the Operator has taken all steps necessary to assure future compliance with the thresholds and other provisions. The foregoing remedies are not exclusive, but shall be in addition to any other remedies available for a violation of the CCMC.
- C.** The Operator shall hire an independent qualified engineer, approved by the Public Works Director/City Engineer, to install equipment to continuously monitor and digitally record vibration levels at the Outer Boundary. Such monitors shall be placed at locations selected by the Public Works Director/City Engineer. The results of all such monitoring shall be submitted to the Public Works Director/City Engineer on a quarterly basis.

SECTION 24, GEOTECHNICAL.

Operator shall comply with the following provisions:

- A. Review.** All proposed grading shall be subject to prior review and approval by the Public Works Director/City Engineer.

B. Geotechnical Investigation. A site-specific geotechnical investigation shall be completed for permanent structures and for grading in excess of 1,000 cubic yards. The Public Works Director/City Engineer may waive this investigation requirement for grading involving between 1,000 and 5,000 cubic yards if there are no permanent structures proposed and grading would not create slopes higher than five feet. The investigation shall be completed by a licensed California Professional Geologist and Geotechnical Engineer and submitted to the Public Works Director/City Engineer for review and approval. The following items must be addressed in the geotechnical investigation.

1. No slope of cut or fill shall have a gradient steeper than two to one (horizontal to vertical) unless specifically approved by a site-specific geotechnical report.
2. Erosion shall be controlled on all slopes and banks so that no sediment or other substances are washed onto public streets or surrounding property. Such control measures may consist of planting and irrigation, dams, cribbing, riprap, sand bagging, netting, berms, or other devices.
3. Cuts and fills shall be minimized to avoid erosion and visual impacts.
4. Slopes shall be restored to their original grade within 30 days of the discontinuance of the use, unless extended by the Public Works Director for good cause shown.

C. Accumulated Ground Movement Plan. Within 180 days of the Effective Date or at such later date as may be approved by the Public Works Director/City Engineer, for good cause shown, the Operator shall submit an Accumulated Ground Movement Plan, including subsidence and uplift, which addresses post-Baldwin Hills Reservoir failure studies to be reviewed and approved by the Public Works Director/City Engineer. The Plan shall identify all measurement locations that will be used and shall include points within and beyond the Oil Field. Measurement locations shall extend a minimum of 1,000 feet beyond the horizontal limit of proposed Bottom Holes. Use of existing measurement locations within the Los Angeles County portion of the Oil Field may be included within the Plan. The Plan shall include both vertical and horizontal ground movement, and shall utilize Global Positioning System technology, as well as any other survey methods deemed appropriate by the Public Works Director/City Engineer to provide the level of accuracy required in monitoring ground movement. The Plan shall identify a monitoring period that extends five years after the end of Oil Operations. The Operator shall promptly address any changes, additions, revisions or modifications that may be required to receive the approval of the Plan by DOGGR and the Public Works Director/City Engineer. This requirement may be waived by the Public Works Director/City Engineer if the Operator can demonstrate that this requirement is being implemented and has been approved for other parts of the Inglewood Oil Field and can conclusively show that the Accumulated Ground Movement Plan applies to the Oil Field within the jurisdiction of the City.

D. Accumulated Ground Movement Study/Survey. Within 60 days of approval of the Plan required in Section 24.C, above, the Operator shall implement the

Accumulated Ground Movement Study/Survey as described in the approved Plan. For drilling proposed within the Oil Field, the Operator must submit the results of the Accumulated Ground Movement Study to the Public Works Director/City Engineer. The study shall be prepared by a licensed expert approved or selected by the Public Works Director/City Engineer, for determining annual ground movement, including subsidence or uplift. The Study results shall identify ground movement during this first study period, including subsidence or uplift, and include a description of how future ground movement survey results will be analyzed and reported. Measurements shall be made using repeat pass Differentially Interferometric Synthetic Aperture Radar technology to establish baseline conditions, since the post-Baldwin Hills Reservoir failure, to measure future ground movement. Within 30 days of completing the ground movement study, the results of the annual monitoring survey shall be forwarded to DOGGR for review and appropriate action and to Public Works Director/City Engineer for review and comment, and the Operator shall see that any changes, additions, revisions or modifications that may be required to receive the approval of such agencies are promptly made and approved. Annual survey reports shall be submitted for a minimum of 5 years after cessation of Oil Operations and the fifth report shall provide conclusions and recommendations regarding the need for continued surveying and reports. If an annual study is not approved, the Operator shall promptly take such actions as are necessary to obtain approval. This requirement may be waived by the Public Works Director/City Engineer if the Operator can demonstrate that this requirement is being implemented and has been approved for other parts of the Oil Field, However, the Operator must conclusively show that the annual ground movement studies apply to the Oil Field within the jurisdiction of the City in order for this requirement to be waived.

- E. Ground Movement Threshold Limits.** In the event that the annual monitoring surveys indicate that ongoing ground movement, equal to or greater than 0.6 inches or a lesser value determined by the Public Works Director/ City Engineer, at any given location is occurring in an upward or downward direction in the vicinity of or in the Oil Field, the Operator shall review and analyze all claims or complaints of Subsidence or Settlement damage that have been submitted to the Operator or the City by the public or a public entity in the 12 months since the last ground movement survey. Based on this information, the Operator shall prepare a report that assesses whether any of the alleged subsidence damage was caused by Oil Operations and submit said report to DOGGR and the Public Works Director/City Engineer.
1. No further drilling or redrilling shall be commenced or approved, and all existing drilling shall immediately cease if required by the Public Works Director/City Engineer, until the cause of the movement has been determined.
 2. If the Operator's operations are the cause or a contributing factor no further drilling or redrilling shall be commenced or approved, and all existing drilling shall immediately cease if required by the Public Works Director/City Engineer, until a remedy, such as adjustments in ground water flood operations, has been

fully implemented to alleviate the ground movement to the satisfaction of DOGGR and the Public Works Director/City Engineer.

3. Injection pressures associated with secondary recovery operations shall not exceed reservoir fracture pressures as specified in California Code of Regulations Title 14, Division 2, Section 1724.10, and as approved by DOGGR.
- F. Fault Investigation Report.** Tanks or other permanent structures shall not be constructed in the Alquist-Priolo Fault Zone without preparation of a Fault Investigation Report by a California Certified Engineering Geologist, to be reviewed and approved by the Building Official. Following the Report, no such structure shall be placed within 50 feet of a known active fault in accordance with California Public Resources Code Division 2, Chapter 7.5 and California Code of Regulations, Title 14, Article 3.
- G. Seismic Activity Tracking.** Within 180 days of the Effective Date or at such later date as may be approved by the Public Works Director/City Engineer, for good cause shown, the Operator must demonstrate ability to track and record seismic activity relating to Oil Operations by using a fully operating and properly maintained accelerometer (in coordination with the Cal Tech Seismological Laboratory). The accelerometer shall 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 and transmitted in real-time to the Caltech Seismological Laboratory. The Operator shall cease operations and inspect all pipelines, tanks, and other infrastructure following any seismic event that exceeds a ground acceleration of 13 percent of gravity (0.13 g). The Operator shall promptly notify the Public Works Director/City Engineer if there is a seismic event that necessitates the ceasing of operations. The Operator shall not reinstitute operations and use of associated pipelines until all infrastructure is structurally sound as determined by DOGGR and the Public Works Director/City Engineer. Documentation of this requirement shall be submitted with the Drilling Use Permit application.
- H. Erosion Control Plan.** Within 180 days of the Effective Date or at such later date as may be approved by the Public Works Director/City Engineer, for good cause shown, Operator shall develop and submit for review and approval by the Public Works Director/City Engineer an Erosion Control Plan. All grading and other Drilling Project activities shall be in complete conformity with the approved Erosion Control Plan. The Erosion Control Plan shall include, but is not limited to, the following measures:
1. Graded areas shall be stabilized with riprap (i.e., crushed stone) or other ground cover as soon as grading is completed. The surface of slopes shall be roughened during the construction period to retain water, increase infiltration, and facilitate establishing vegetation. Tracked machinery shall be operated up and down (parallel with) slopes to leave horizontal (perpendicular) depressions in the soil, which run across the slope, on the contour;

2. Slope breaks, such as diversions, benches, or contour furrows shall be constructed to reduce the length of cut- and fill-slopes, thus limiting sheet and rill erosion and preventing gully erosion;
 3. Sediment barriers shall be used around construction areas to retain soil particles on-site and reduce surface runoff velocities during rainfall events. Sediment barriers could include straw bales, silt fences, and gravel and earth berms. Silt fences shall be placed on slope contours in areas where shallow overland flow is anticipated;
 4. Temporary and permanent drainages shall be employed, as necessary, to reduce slope erosion and prevent damage to construction areas. Sheet flow across or toward a disturbed area shall be intercepted and conveyed to a low to moderate gradient (1 to 5 percent slope) sediment basin, erosion-resistant drainage channel, or a level, well-vegetated area. Drainages include swales, diversion dikes, and slope drains; and
 5. Waterbars, rolling dips, and outsloping roads shall be constructed as part of new road construction to disperse runoff and reduce the erosive forces associated with concentrated flows.
- I. **Slope Restoration.** Slopes shall be restored to their original grade, to the satisfaction of the Public Works Director/City Engineer, once the use that required the grading of the slope has been discontinued. However, if restoration of a slope would negatively affect existing drainage patterns or slope stability, then the slope shall be restored to a grade that avoids these negative effects, as determined by the Public Works Director/City Engineer.

SECTION 25, GROUNDWATER MONITORING.

Within 180 days of the Effective Date or at such later date as may be approved by the Public Works Director/City Engineer, for good cause shown, the Operator shall develop, implement, and carry out a Groundwater Monitoring Program for the Drilling Project site or Oil Field that is reviewed and approved by the Public Works Director/City Engineer. The Operator's Groundwater Monitoring Program shall be consistent with all requirements of the RWQCB, and shall be submitted to the Water Replenishment District of Southern California, the West Basin Municipal Water District, and Golden State Water Company for review. Pursuant to the approved Program, the Operator shall install and maintain groundwater monitoring wells in the vicinity of each surface water retention basin, which is permitted by the RWQCB. Such monitoring wells shall be completed to the base of the permeable, potentially water-bearing, alluvium, Lakewood Formation, and San Pedro Formation, and to the top of the underlying, non-water bearing Pico Formation, as determined by a California-certified professional geologist to be approved by the Public Works Director/City Engineer. The Program shall address water level and water quality, and shall include deep zone water level monitoring within the Pico Formation and other cap rock units on both east and west sides of the Newport Inglewood Fault Zone. The RWQCB and the Public Works

Director/City Engineer shall be advised of the results of such monitoring on a quarterly basis and shall be immediately advised if such monitoring indicates a potential problem.

SECTION 26. WATER MANAGEMENT.

Within 180 days of the Effective Date or at such later date as may be approved by the Public Works Director/City Engineer, for good cause shown, the Operator shall submit a Water Management Plan, to be reviewed and approved by the Public Works Director/City Engineer, that documents best water management practices, which includes water conservation measures, the use of a drip irrigation system, and provisions for the use of surface water runoff in the retention basins for dust suppression and landscaping. The Plan shall also address the availability of reclaimed water at the Drilling Project site and use of such water to the greatest extent technically feasible if and when it becomes available. The Plan shall also include any additional information required by the Public Works Director/City Engineer. Once a Drilling Use Permit is approved, the Operator and Public Works Director/City Engineer shall review the Water Management Plan every three years to determine if modifications are required. If a source of reclaimed water should become available in subsequent years, the Operator shall be required to modify the Plan to accommodate the use of reclaim water to the greatest extent technically feasible. Any modifications to the Program shall be submitted to the Public Works Director/City Engineer for review and approval.

SECTION 27. STORMWATER AND DRAINAGE MANAGEMENT.

- A. Stormwater Pollution Prevention Plan (SWPPP).** The Operator shall at all times maintain and implement all provisions of a SWPPP that has been inspected by the RWQCB and the Public Works Director/City Engineer. Prior to conducting any Drilling Project activities, the Operator shall provide the Public Works Director/City Engineer with a copy of the SWPPP, and any future modifications, revisions, alterations, or replacements.
- B. Spill Prevention, Control, and Countermeasure Plan (SPCCP).** The Operator shall maintain and implement all provisions of a SPCCP, which meets the requirements of the Local California Unified Program Agency and the EPA. Prior to conducting any Drilling Project activities, the Operator shall provide the Fire Chief with a copy of the SPCCP and any future modifications, revisions, or alterations, or replacements.
- C. Hydrologic Analysis.** A site-specific hydrologic analysis shall be completed to evaluate anticipated changes in drainage patterns and associated increased runoff at the site for any new grading that results in the loss of vegetated, sandy, permeable ground areas, which could alter surface runoff at the site. The analysis shall be completed consistent with Standard Urban Stormwater Mitigation Plan regulations, as specified by the Public Works Director/City Engineer. The hydrologic analysis shall be submitted to the Public Works Director/City Engineer for review and approval prior to conducting any Drilling Project activities. Any new

grading that requires a hydrologic analysis shall not occur until the Public Works Director/City Engineer approves the hydrologic analysis.

SECTION 28. STORAGE OF HAZARDOUS MATERIALS AND OIL FIELD WASTE REMOVAL.

- A. Storage of Hazardous Materials.** The Operator shall comply with all provisions of Subchapter 9.03.100, et seq. of the CCMC relating to Hazardous Materials Disclosure Requirements, Business Plans, and Inspections.
- B. Waste Discharge and Collection.** No drilling, redrilling, reworking or maintenance waste (“Drilling Waste”) shall be discharged into any sewer, storm drain, irrigation systems, stream, creek, street, highway or drainage canal. No Drilling Waste shall be discharged on the ground, except for the proper use of active drilling sumps and mud pits. Drilling Waste shall be discharged into portable steel tanks compliant with API standards and collected in portable steel bins compliant with US Department of Transportation standards. All Drilling Waste shall be disposed of in compliance with all applicable City, regional, State, and Federal rules and regulations. Drilling Waste materials, that are not intended to be injected into a Class II Well as permitted by DOGGR, shall be removed from the Oil Field no later than 30 days following the completion of the drilling operation that generated the waste.
- C. Recycling Plan.** Within 180 days of the Effective Date or at such later date as may be approved by the Public Works Director/City Engineer, for good cause shown, the Operator shall prepare a Recycling Plan, to be reviewed and approved by the Public Works Director/City Engineer, which shall identify how recycling will be incorporated into its operations, including debris generated during construction, drilling and other operations; use mulching, composting, and grass-cycling on landscaped areas; design and allocate recycling collection and storage space; create an employee participation recycling program; and conduct employee education through a series of brief educational sessions to demonstrate how employees can further contribute to recycling and conservation.

SECTION 29. BIOLOGICAL RESOURCES.

All Oil Operations within the City’s jurisdiction shall be conducted in a manner that minimizes impacts to biological resources and shall comply with the following provisions:

- A. Oil Spill Response.** The Operator shall comply with all provisions of the approved ERP to protect biological species and to revegetate any areas disturbed during an oil spill or clean-up activities. At a minimum, the ERP shall include:
 - 1. Measures to avoid impacts on native vegetation, wildlife habitats, plant and animal species, and environmentally sensitive habitat areas during response and cleanup operations;

2. Measures that identify low-impact site-specific methods for addressing spills or other accidents such as hand-cutting contaminated vegetation and using low-pressure water flushing; and
 3. If disturbance cannot be avoided, the ERP shall provide site-specific habitat restoration plans and species-specific measures to mitigate impacts on sensitive species and to restore native plant and animal communities to pre-spill conditions. This plan shall include a schedule for re-establishing vegetation that replicates the habitat disturbed, or, for disturbed habitat previously dominated by non-native species, replacement with suitable native species.
- B. Special Status Species and Habitat Protection Plan.** Within 180 days of the Effective Date or at such later date as may be approved by the Public Works Director/City Engineer, for good cause shown, the Operator shall prepare, using a qualified biologist approved by the City, a Special Status Species and Habitat Protection Plan, which shall be submitted to the Community Development Director for review and approval. Prior to any disturbance of sensitive natural habitat areas as identified in the Plan, the biologist shall conduct a survey of the Drilling Project area to determine if impacts to sensitive natural habitat, including coastal sagebrush, coyote bush scrub, riparian scrub, and oak woodland will occur. If the biologist determines that impact to sensitive natural habitat will occur, then the Operator shall have a City-approved restoration specialist, with expertise in southern California ecosystems and revegetation techniques, identify habitat restoration and revegetation measures for the Plan. No removal of sensitive natural habitat shall occur until the Plan has been approved by the City. The Operator shall comply with all provisions of the Plan. Any modifications to the Plan shall be submitted to the Community Development Director for review and approval.
- C. Project-Specific Surveys.** The following surveys shall be conducted prior to any vegetation removal in sensitive natural habitat as identified in the Special Status Species and Habitat Protection Plan.
1. Sensitive plant survey(s), conducted by a City-approved ecologist/botanist.
 2. Sensitive wildlife survey(s) in habitat areas that could support sensitive wildlife species, conducted by a City-approved biologist.
 3. Breeding and nesting bird survey(s) if the drilling activities will occur during the breeding season (February 1 to August 31 for raptors, and March 15 to September 15 for sensitive/common birds), conducted by a City-approved biologist.
- D. Listed Plant or Wildlife Species.** If federal-or state-listed threatened, endangered, candidate, or special-status plant or wildlife species are found, then the Operator shall comply with all applicable US Fish and Wildlife and California Department of Fish and Game rules and regulations. The Operator shall provide written documentation to the Community Development Director demonstrating compliance

with the US Fish and Wildlife Service and California Department of Fish and Game requirements.

- E. Monitoring.** If the project-specific surveys, identified in Subsection C above, find sensitive plants, wildlife species, or nesting birds, a biological monitor hired by the Operator, and approved by the Community Development Director, shall be on site during well drilling operations to monitor the impact that the Drilling Project activities might have on sensitive resources. The biological monitor shall be responsible for the following:
1. Establishing a 300-foot buffer around any active breeding bird nests;
 2. Assuring that vegetation removal does not harm sensitive wildlife species;
 3. Monitoring for sensitive wildlife species and relocating them to suitable habitat; and
 4. Ensuring exclusionary fencing is installed around Drilling Project sites to reduce impacts to sensitive wildlife.
- F. Tree and Riparian Scrub Removal.** Removal of native or non-native trees and riparian scrub vegetation shall be scheduled, as possible, for removal outside the nesting season to avoid impacts to nesting birds. If avoidance of removal of trees or riparian scrub during the recommended periods is not possible, a City-approved biologist shall perform a survey to ensure that no nesting birds are present prior to removal. If for any reason a nest must be removed during the nesting season, the Operator shall provide a written report to the Community Development Director documenting compliance with the US Fish and Wildlife Service and California Department of Fish and Game, authorization of the nest relocation, and all relocation efforts.
- G. Habitat Restoration.** Within 60 days of completing Drilling Project activities that impact sensitive natural habitat, the Operator shall begin habitat restoration consistent with the approved Special Status Species and Habitat Protection Plan. Restoration priority shall be given to areas of degraded habitat connecting areas of higher quality habitat and where restoration would produce larger corridors to support the migration and movement of wildlife. The Operator shall replace any loss of sensitive natural habitat at the following ratios:
1. 1:1 for each acre of coastal sagebrush or coyote bush scrub.
 2. 2:1 for each acre of riparian scrub or oak woodland.

SECTION 30. CULTURAL RESOURCES.

- A. Archeological Training.** The Operator shall provide archeological training for all persons who will be involved with ground disturbance activities for the proposed Drilling Project. Documentation that such training has occurred shall be submitted to the Community Development Director prior to conducting any ground disturbance activities. All such persons shall be required to participate in the training and must

receive training material prepared by a qualified archaeologist prior to working on ground disturbance activities. The training material shall include, at a minimum, the following:

1. Review of the types of archaeological artifacts that may be uncovered;
2. Examples of common archaeological artifacts to examine;
3. Review of what makes an archaeological resource significant to archaeologists and local Native Americans;
4. Procedures for notifying involved or interested parties in case of a new discovery;
5. Reporting requirements and responsibilities of construction personnel;
6. Procedures that shall be used to record, evaluate, and mitigate new discoveries; and
7. Procedures that shall be followed in the case of discovery of disturbed, as well as intact, human burials and burial-associated artifacts.

B. Cultural Resources Assessment.

1. Prior to conducting ground disturbance activities, the Operator shall submit a Cultural Resources Assessment to be reviewed and approved or conditionally approved by the Community Development Director. The Assessment shall be prepared by a qualified City-approved archaeologist and shall contain an archeological, cultural resources, and paleontological assessment of the proposed Drilling Project area to determine the likelihood of identifying resources. The Assessment shall include a records search, and site reconnaissance, and include recommendations for mitigating potential impacts. In the event that unknown archaeological artifacts are encountered during grading, clearing, grubbing, and/or other Drilling Project activities, work shall be stopped immediately in the vicinity of the find and the resource shall be evaluated by a qualified independent archaeologist, approved by the Community Development Director. The archeologist shall also identify whether the proposed Drilling Project would require monitoring and the preparation of a Treatment Plan to ensure that any new discoveries are adequately recorded, evaluated, and, if significant, mitigated. If a Treatment Plan is required, it shall be submitted prior to ground disturbance activities. The Treatment Plan shall be approved by the Community Development Director, and the Operator shall comply with all provisions of the Assessment.
2. The Operator shall have a qualified paleontologist, approved by the Community Development Director, monitor all rough grading and other significant ground disturbing activities in paleontological sensitive sediments. The sensitive sediments that have been identified within the Oil Field include the Lower to Middle Pleistocene San Pedro Formation and the Middle to Upper Pleistocene Lakewood Formation. A paleontologist will not be required on site if excavation is only occurring in artificial fill or Holocene alluvium.

- C. Human Remains.** In the event human remains are discovered, the qualified archeologist, in consultation with the Community Development Director, shall determine disposition of the remains in accordance with California Health and Safety Code §7050.5 and CEQA Guidelines §15064.5(e).

SECTION 31. CONSOLIDATION AND ANNUAL DRILLING, REDRILLING, WELL ABANDONMENT, AND WELL PAD RESTORATION PLAN.

- A. Consolidation.** The Operator shall consolidate well drilling operations within the Oil Field to reduce impacts to surrounding land uses.

- B. Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan.** The Operator shall develop an Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan (the "Annual Drilling Plan"). The Annual Drilling Plan shall be submitted each year of the Comprehensive Drilling Plan period for review and approval by the Community Development Director. The Annual Drilling Plan shall describe all drilling and related activities and provide a schedule to avoid over concentration of such activities in any particular year and in any one area. No drilling, redrilling or abandonment activity may be commenced, nor shall any Drilling Use Permit be issued for any drilling or redrilling activity, unless it is described in an approved Annual Drilling Plan or an amendment thereto. The Annual Drilling Plan shall include the following:

1. The maximum number of wells to be drilled or redrilled on an annual basis, which shall be no more than two wells per year for the first two years; if in any year thereafter, the Community Development Director determines that this Ordinance is protective of health, safety, and general welfare of the public, then three wells per year may be drilled, until such time that the Community Development Director determines otherwise;
2. No more than one drilling rig in place at any one time;
3. Approximate location of all wells proposed to be drilled or redrilled. This information shall also include proposed and existing wells in the Los Angeles County portion of the Inglewood Oil Field to the extent such wells may result in overconcentration of impacts to Culver City neighborhoods;
4. Approximate location of all proposed new well pads, including their size and dimensions;
5. Estimated target depth of all proposed wells and their estimated Bottom Hole locations;
6. A narrative of the steps that have been taken to maximize use of existing well pads, maximize use of redrilled wells, and maximize the consolidation of wells. Where well consolidation is not proposed, sufficient detail, as determined and requested by the Community Development Director, shall be provided for the City to review the extent to which well consolidation is not technically feasible and commercially reasonable;

7. Location of all proposed well Abandonments in accordance with DOGGR integrity testing program of idle wells;
 8. Location of all well pads proposed to be abandoned and restored;
 9. A proposed schedule and phasing of the drilling, redrilling, well abandonment, well pad abandonment, and restoration activities;
 10. A topographic vertical profile showing proposed location of new wells that reflects local terrain conditions and that addresses the potential visibility of existing and proposed wells and other production facilities from areas outside the Oil Field;
 11. Location of specific landscaping and/or fencing used to visually screen the Oil Operations and related equipment from residential, recreational, and institutional land uses or adjacent public streets, and to improve the visual appearance of existing Oil Field operations. If no landscaping is proposed, an explanation as to the infeasibility of screening particular operations and/or equipment;
 12. A description of all grading that will be conducted, which shall be considered the annual grading plan for the Oil Field;
 13. Inventory of wells within drilling setbacks, see Section 21.J;
 14. Availability and feasibility of the use of natural gas-powered drill rigs or other technology capable of reducing environmental impacts (See Clean Technology Assessment, at Section 31.B); and
 15. Identify and report on condition of all existing wells within 1,000 feet of any proposed injection wells.
- C. Deep-Zone and Mid-Zone Supplements.** As described in Section 21.J.2, a Deep-Zone Supplement or Mid-Zone Supplement (Supplements) to the Annual Drilling Plan is required for all Deep-Zone Wells or Mid-Zone Wells where the Top Hole is within 800 feet of a Sensitive Developed Area. The Supplements shall include a study of the technical feasibility and commercial reasonability of Slant Drilling to locate the Top Hole of any such well further away from any Sensitive Development Area. The study shall justify the proposed surface location, and provide sufficient detail regarding the feasibility of locating the Top Hole away from a Sensitive Developed Area to mitigate potential impacts and still reach the targeted Bottom Hole location. The Operator shall provide the Community Development Director with any additional information requested in order to complete review of the Supplement. If any information regarding Slant Drilling is confidential, the City will enter into an agreement with the Operator to protect such information.

The Community Development Director shall review and approve Supplements within 45 calendar days of submission to the City. The Community Development Director shall either approve the plan or provide a list of deficiencies within the 45-day timeframe. The Operator may drill any wells approved under the Annual Drilling Plan regardless of the status of the City's review of the Supplements. Similarly, the

Operator may drill any wells approved under a Supplement regardless of the status of review and approval of the Annual Drilling Plan. Changes to well pad locations as a result of the review of the Supplements shall not require resubmittal of the Annual Drilling Plan or delay any drilling under the Annual Drilling Plan, beyond the time necessary to implement such changes.

SECTION 32. HYDRAULIC FRACTURING.

Hydraulic Fracturing is prohibited until DOGGR or the State Legislature adopts comprehensive regulations that will adequately protect the public health and safety and the environment.

SECTION 33. WELL REWORK, MAINTENANCE AND ABANDONMENT RIGS.

- A.** No more than two rigs used for reworking, maintenance and/or abandonment shall be present within the Oil Field at any one time, unless an emergency condition requires additional rigs.
- B.** With the exception of emergencies, well reworking, maintenance and abandonment rig operations shall not be allowed after 7:00 p.m. or before 7:00 a.m., nor on Saturdays, Sundays or legal holidays.
- C.** Rigs used for rework, maintenance and abandonment shall be removed from the Oil Field within seven days following the completion of reworking, maintenance and abandonment operations unless the rig will be used on another well at the Oil Field within five days.

SECTION 34. PROCESSING.

All processing operations shall be conducted in accordance with the best available technology and shall comply with the following provisions:

- A. Limits on Processing Operations.** Unless Operator submit to the Community Development Director documentation that additional processing operations are required by DOGGR, the only processing operations permitted at the well site are the dehydration of crude oil and gas produced from the well, the storage, handling, recycling, and transportation of such materials; and those processing operations required for water injection purposes.
- B. Well Pump Motors.** All well pumping units shall be operated by electric motors.
- C. Well Pumps.** Downhole submersible pumps and low-profile pumping units for production wells must be used when there is the potential for the pump or pumping unit to be visible to surrounding residences and park users, as determined by the Community Development Director.

D. Removal by Pipeline Only. All oil, gas, and other hydrocarbon substances, except propane, produced from any well within the Oil Field shall be shipped and transported through pipelines, except in case of an emergency or when access to a pipeline becomes unavailable. If the Operator provides documentation satisfactory to the Fire Chief that any pipeline through which oil or gas is currently transported is unavailable for the safe transportation of said products due to maintenance problems with the pipeline, or lack of sufficient capacity within the pipeline to handle the volume of oil and gas needing transportation, or because the owner or operator of such pipeline elects to discontinue transporting oil or gas through such pipeline, then the Operator shall, within 180 days of the date the existing pipeline becomes unavailable, seek to acquire a private right of way or easement, or shall file an application for a right of way, easement, encroachment permit, or franchise for the construction of a replacement pipeline and shall diligently prosecute such application until such pipeline is completed. During any emergency situation, or during such time as any existing pipeline becomes unsafe or unavailable, oil and gas may be transported by truck for up to 180 days as allowed by the Fire Chief until the emergency situation is resolved or until a replacement pipeline is permitted and constructed in compliance with all applicable laws and regulations. In addition, the Operator shall coordinate with emergency service providers to alert them regarding the emergency and provide an oversight mechanism to ensure prompt resolution.

E. Pipelines. The Operator shall comply with the following provisions:

1. New pipelines that remove oil or gas from the Oil Field shall be buried below the surface of the ground;
2. All pipelines that are not enclosed within a fence, and all pipelines (whether or not fenced) which are located within 500 feet of any residential, commercial, cultural, educational, religious or government building, shall be placed underground or covered with materials approved by the Fire Chief. Said covers shall be maintained in a neat, orderly, and secure manner;
3. Any and all water or brine produced during pipeline construction shall either be injected in accordance with DOGGR requirements, or disposed of in accordance with other local, state or federal regulations. Documentation of compliance with this Section shall be submitted to the Public Works Director/City Engineer;
4. New pipeline corridors shall be consolidated with existing pipelines or electrical transmission corridors where feasible; and
5. Upon completion of pipeline construction, the site shall be restored to the approximate previous grade and condition to the satisfaction of the Public Works Director/City Engineer.

F. Active Pipeline Plot Plan. Within one year of the Effective Date, or at such later date as may be approved by the Fire Chief, for good cause shown, the Operator shall prepare and submit to the Fire Chief a plot plan depicting the location of all

active pipelines regulated by the California Department of Transportation or California State Fire Marshall owned by the Operator that are located within and outside the Oil Field, including waste water, and trunk and gathering line to transport crude oil or hydrocarbon substances. In addition, the Operator shall submit to the Fire Chief an ALTA survey indicating the exact location of all such pipelines. New pipelines or relocation of existing pipelines shall require the submittal of a revised plot plan within 30 days of installation of the pipelines, or at such later date as may be approved by the Fire Chief, for good cause shown.

- G. Machinery Enclosures.** The Operator shall maintain enclosures around machinery with moving parts consisting of a fence, screening, or housing. Said enclosures shall be installed in compliance with the CCMC.
- H. Opening Protections.** The Operator shall cap, close, or protect the openings in all oil wells, test holes, and similar excavation to prevent injury or accidents.
- I. Transportation Risk Management and Prevention Plan.** Within 180 days of the Effective Date, or at such later date as may be approved by the Public Works Director/City Engineer, Operator shall prepare and submit to the Public Works Director/City Engineer for review and approval a Transportation Risk Management and Prevention Plan, which shall include, but is not limited to, the following:
1. Identification of transportation routes of propane, butane and natural gas liquids for all Oil Operations;
 2. Provisions for conducting biennial comprehensive audits of the carriers to assure satisfactory records, driver hiring practices, driver training programs, programs to control drug and alcohol abuse, safety incentive program, satisfactory vehicle inspections and maintenance procedures and emergency notifications;
 3. Provisions for conducting biennial comprehensive audits of the carriers to assure satisfactory records, driver hiring practices, driver training programs, programs to control drug and alcohol abuse, safety incentive program, satisfactory vehicle inspections and maintenance procedures and emergency notifications;
 4. Provisions for allowing only carriers that receive a satisfactory rating under the above audit;
 5. Truck loading procedures and checklist for ensuring that the loading rack operator and the truck driver both conduct and document in writing, a visual inspection of the truck before loading and after completing the loading;
 6. Provisions for requiring shippers to use carriers with vehicle monitoring system for governing or monitoring vehicle speed;
 7. Provisions for requiring shippers to use carriers with cellular phones for shipments; and

8. Any other additional information required by the Public Works Director/City Engineer.

SECTION 35. WELL CELLARS.

All well cellars shall be constructed in accordance with the most current API standards and DOGGR requirements, whichever are more restrictive. In addition, the Operator shall comply with the following provisions:

- A. Cellar Fluids.** Well cellars shall be kept free of all oil, water, or debris at all times. During drilling, re-drilling, reworking and maintenance, the cellar shall be kept free of excess fluids by a pump that discharges into a waste tank, mud pit, vacuum truck, or other approved disposal system.
- B. Access to Multi-Well Cellars.** All multi-well cellars exceeding three feet in depth and 25 feet in length shall have two means of entrance and exit and an additional exit for every 50 feet in length thereafter. At least one means of entrance or exit for all multi-well cellars of 25 feet in length shall be a stairway constructed to California Division of Industrial Safety standards.
- C. Single-Cellar Covers.** All single cellars shall be covered with open grating and have no openings larger than three inches at any point. Covers shall be capable of supporting vehicle weight or guardrails shall be erected to prevent vehicle access.
- D. Cellar Ladder Openings.** All openings for ladders through grating shall be designed to allow exit from underside without obstruction and shall be kept free of storage of any type. Said openings shall not be less than 24 inches on either side.

SECTION 36. LIGHTING.

Outdoor lighting shall be restricted to only those lights that are required by the CCMC for the lighting of building exteriors, drilling, and re-drilling rigs and for safety and security needs. In addition, the Operator shall comply with the following provisions:

- A. Screening.** All new point lighting sources within the Oil Field shall be screened and directed to confine direct rays to the Oil Field and to prevent offsite spillover of lighting to surrounding residential, recreational, and other Sensitive Developed Areas.
- B. Lighting Plan.** A detailed Lighting Plan shall be prepared for each new permanent structure and submitted to the Community Development Director for review and approval. No work may be commenced on such permanent structure until the Lighting Plan has been approved by the Community Development Director. The Lighting Plan shall include any measures requested by the Community Development Director

SECTION 37. LANDSCAPING.

- A. Landscaping Plan.** Within 180 days of the Effective Date or at such later date as may be approved by the Community Development Director, for good cause shown, Operator shall submit a Landscaping Plan to be reviewed and approved or conditionally approved by the Community Development Director. The Plan shall be designed to: (1) specify landscaping and fencing that will be used to visually screen the Oil Operations and related equipment from Developed Areas or adjacent public streets; (2) improve the visual appearance of the existing Oil Field; and (3) ensure compatibility with the surrounding environment. The Plan shall be reviewed by the Operator on an annual basis to determine if modifications to the Plan are required and report its findings to the Community Development Director. Such findings and proposed modifications to the Plan shall be submitted to the Community Development Director for review and approval. Operator shall comply with all provisions of the approved Plan.
- B. Irrigation.** Landscaping shall be irrigated and maintained to ensure that landscaping provides sufficient screening.
- C. Inspection and Maintenance.** All landscaping and vegetation shall be routinely inspected (on at least a monthly basis) and maintained in a neat, clean and healthful condition, including proper watering, pruning, weeding, removal of litter, fertilizing, and replacement of plants as needed. Litter shall also be removed on a regular basis when necessary.

SECTION 38. PUBLIC ROADWAYS AND PRIVATE ROAD CONSTRUCTION

- A. Deliveries.** In the event deliveries of new drilling equipment or the removal of old drilling rigs would utilize Culver City roadways, all truck routes and oversize vehicle trips must be approved by the Public Works Director/City Engineer prior to construction. The Drilling Project traffic shall avoid peak hours and residential roadways to the maximum extent feasible.
- B. Construction of Private Roads.** Roads and other excavations shall be designed, constructed, and maintained to provide stability of fill, minimize disfigurement of the landscape, prevent deterioration of vegetation, maintain natural drainage, and minimize erosion. Prior to construction of any new road, the Operator shall prepare and submit to the Public Works Director/City Engineer for review and approval a Private Road Construction Plan. The Operator shall thereafter comply with all provisions of the approved private road construction plan. All new private access roads leading off any surfaced public street or highway shall be paved with asphalt or concrete not less than three inches thick for the first 50 feet of said access road from the public street or highway.

SECTION 39. SIGNS.

- A. Perimeter and Entrance Identification Signs.** Identification signs, at intervals acceptable to the Community Development Director, shall be posted and maintained in good condition along the Outer Boundary line fence, along the fences adjoining the public roads that pass through the Oil Field and at any entrance to the Oil Field. Each sign shall prominently display current and reliable emergency contact information that will enable a person to promptly reach, at all times, a representative of the Operator who will have the expertise to address any potential problem and recommend a corrective course of action. Each sign shall also have the telephone number of the Community Development Department and the number of SCAQMD that can be called if odors are detected. Identification signs shall be installed within 60 days of the Effective Date or at such later date as may be approved by the Community Development Director, for good cause shown.
- B. Derrick.** A sign shall be placed on each derrick that displays the name and number of the well being drilled or operated and the name of the Operator. The letters of the sign shall be at least two inches in height and fully visible from two opposite sides of the derrick.
- C. Fire Prevention.** The Operator shall post the permitted premises with signage as required by the Fire Chief, in accordance with the California Fire Code, including, but not limited to, appropriate “No smoking” signs, with letters at least four inches in height.
- D. Other Required Signs.** All identification signs, warning signs, no trespassing signs, and other signs required by City, regional, State and Federal regulations shall be properly posted and maintained in all required locations and in good condition.
- E. Well Identification Signs.** Per California Fire Code, well identification signs shall include name of the owner or Operator, the well name and well number, and a telephone number where a responsible party can be reached at any time. Each well identification sign shall be posted and maintained in good condition at each well location to the satisfaction of the Fire Chief.
- F. No Littering Signs.** “No littering” signs shall be prominently posted and maintained in good condition on all Oil Field entrance gates. Such signs shall be installed within 60 days of the Effective Date or at such later date as may be approved by the Community Development Director, for good cause shown.
- G. City Approval.** The location, type face, design and quality of all signs shall be subject to approval by the Community Development Director. All such signs shall be maintained in good condition and replaced when necessary.

SECTION 40. EQUIPMENT REMOVAL AND MAINTENANCE.

- A. Abandoned and Unused Equipment Removal Plan.** For projects within the Oil Field, within 180 days of the Effective Date or at such later date as may be

approved by the Public Works Director/City Engineer, for good cause shown, the Operator shall submit an Unused or Abandoned Equipment Removal Plan to the Public Works Director/City Engineer for review and approval. The Plan shall include an inventory of all unused or abandoned equipment identifying all parts, equipment and machinery that is no longer in service and is not intended for prompt use in connection with Oil Operations. All existing facilities that have reached the end of their useful economic life shall be properly decommissioned and removed from the Oil Field within one year from the Effective Date and, thereafter, all new facilities that have reached the end of their useful economic life shall be properly decommissioned and removed from the Oil Field within one year. The Operator shall file a quarterly compliance report to the Public Works Director/City Engineer. Equipment and materials not necessary to Oil Operations as identified by the Public Works Director/City Engineer shall be promptly removed from view of Sensitive Developed Areas.

- B. Revegetate Equipment Removal Areas.** Areas not slated for future use, as identified in the Annual Drilling, Redrilling, Well Abandonment, and Well Pad Restoration Plan, shall be restored and revegetated within 90 days of termination of use, unless such restoration and revegetation would interfere with fire safety or access to Oil Operations, as determined by the Fire Chief.
- C. Equipment Maintenance.** All actively-used equipment, improvements, facilities, and other personal property or fixtures shall be maintained in good condition to the satisfaction of the Public Works Director/City Engineer.

SECTION 41. OTHER STANDARDS.

- A. Security.** All unmanned entrances to the Oil Field shall be equipped with sliding gates that shall be kept closed at all times except when authorized vehicles are entering or leaving the field. The Operator shall have a security guard on duty 24 hours per day.
- B Fencing.** All portions of the oil and gas drilling operations shall be enclosed with a fence compliant with DOGGR regulations codified at California Code of Regulations Title 14, Article 3, sections 1778 and 1779, or as may be subsequently amended by the state.
- C. Storage of Equipment.** There shall be no storage of material, equipment, machinery or vehicles which are not intended for prompt use in connection with Oil Operations. Any equipment that is not intended for prompt use shall be removed from the Oil Field.
- D. Painting.** Within two years of the Effective Date, or at such later date as may be approved by the Community Development Director for good cause shown, all Oil Operations-related structures visible from public roadways and surrounding properties shall be painted or otherwise surfaced or textured with a color that is compatible with Developed Areas and has been approved by the Community

Development Director. The painting or other surfacing of structures shall be maintained in good condition.

SECTION 42. DIRECTIONAL SURVEYS REQUIRED ON CERTAIN WELLS.

Whenever Operator drills, re-drills, or deepens any well, or well hole, and the Top Hole or Bottom Hole location is within 400 feet of any exterior boundary line of any City-owned property, the Operator shall make, record and keep true and accurate sub-surface directional surveys of such well or well hole, with stations at not more than 100 foot intervals in such well or well hole. The result of each survey shall be fully and accurately shown on a plat, which shall be submitted to the Community Development Director. Each plat shall include:

- A.** The exterior boundaries of the property on which such well or well hole has been or is being drilled, re-drilled or deepened; and, if such property is part of, but less than the whole of, a larger parcel of land owned, leased or controlled, or operated or to be operated, as a single drilling or operating unit of lease, the exterior boundaries of such larger parcel.
- B.** The location of such well or well hole on the surface in relation to such boundaries.
- C.** The sub-surface location of the point of cementing each string of casing.
- D.** The sub-surface location of the lowest point in such well or well hole, from which production of oil, gas and/or other hydrocarbon substances is procured or obtained.
- E.** The continuous and entire course of the well hole, as surveyed, shall be presented accurately on one plat.

SECTION 43. FILING SURVEYS REQUIREMENT.

- A.** A surface survey, which indicates the location and number of well heads within the Oil Field, and a plat of each sub-surface directional survey, shall be prepared by a land surveyor or civil engineer registered in the State of California and qualified to prepare such surveys. The surveyor or civil engineer shall place a certification on the survey maps stating: "I hereby certify that I am a registered land survey (or civil engineer) of the State of California; that this map consisting of (#) sheet(s) is a true and complete survey as shown and was made by me or under my direction on (date); and accurately reflects the requirements contained in Section 43 of this Ordinance."
- B.** The survey shall be based on the City's GPS coordinate system and be in AutoCAD format (latest version).
- C.** A digital copy of the survey shall also be submitted.

SECTION 44. DUPLICATE NOTICES.

The Operator shall file with the Community Development Director a duplicate notice of all notices required by any State regulatory agency.

SECTION 45. INSPECTION OF PREMISES.

Any City official shall have the right and privilege, at any time, to enter upon any property owned or operated by the Operator within the City for the purpose of making inspections.

SECTION 46. WELL AND PRODUCTION REPORTING.

Operators proposing well drilling operations on the Oil Field shall provide annual Production Reports to the Community Development Director on the well production within the area of the field under the jurisdiction of the City as well as the overall field. This reporting shall include all copies of all DOGGR Forms 110 and 110B during the previous 12 months; amount of oil and gas produced by well number; number and mapped location of all wells (active, injection); the number and mapped location of abandoned and idle wells, including date each well was idled or abandoned; and any other information requested by the City.

SECTION 47. IDLE WELL TESTING AND MAINTENANCE.

The Operator shall comply with Title 14, Section 1723.9 of the California Code of Regulations regarding testing and maintenance of idle wells, or subsequently enacted state regulations regarding testing and maintenance of idle wells. The Operator shall carry out all additional tests, remedial operations, and mitigation measures required by DOGGR if any idle wells do not meet the test standards.

SECTION 48. INJECTION WELLS.

Existing Injection Wells must comply with all DOGGR requirements, including sealing and casing integrity, prior to use. Injection Wells shall be properly Abandoned according to DOGGR requirements.

SECTION 49. ABANDONED WELL TESTING.

The Operator shall conduct quarterly testing of abandoned wells for hydrocarbon vapor leaks. The first quarterly testing shall be completed within 120 days of the Effective Date. The procedures and equipment for such testing shall be reviewed and approved by the Public Works Director/City Engineer. Abandoned wells that are found to be leaking hydrocarbons shall be reported to the Public Works Director/City Engineer and

DOGGR within 12 hours of the abandoned well testing. DOGGR shall determine if the well needs to be re-abandoned. If directed by DOGGR, the Operator shall re-abandon the well in accordance with DOGGR rules and regulations. Any abandoned well that is not found to be leaking hydrocarbon vapors for eight consecutive quarters (after a hydrocarbon leak is found), shall thereafter be tested on annual basis and such test results shall be submitted to the Public Works Director/City Engineer.

SECTION 50. WELL AND WELL PAD ABANDONMENT.

Wells which remain idle for five years shall be subject to review by the Community Development Director, Fire Chief, and DOGGR to determine if the well should be abandoned, unless Operator can show that the well will go back into production within 180 days. Idle wells shall be abandoned within 180 days of receiving an order from the Fire Chief or DOGGR to abandon. If DOGGR orders the Operator to plug and abandon any wells, the Operator shall commence promptly and proceed diligently with the plugging and Abandonment operations in accordance with DOGGR rules and regulations and the terms of the DOGGR permit to plug and abandon the well. The Operator shall also file DOGGR form titled "Notice of Intention to Abandon/Re-Abandon a Well" with the Fire Chief and the Community Development Director. Well Abandonment may commence once all necessary permits and approvals are obtained. All wells abandoned at the Oil Field shall utilize a total of 150-foot cement surface plug.

If the well pad associated with the well Abandonment does not contain other production, injection, or idle wells, and will not be used for future drilling, then the Operator shall promptly abandon the well pad consistent with the following provisions:

- A. Closure of Sumps.** The Operator shall clean out all sumps, cellars, and ditches, and level and fill all sumps and depressions pursuant to DOGGR requirements. If sumps are lined with concrete, bottoms and walls shall be broken up and removed. Sumps shall be closed in accordance with RWQCB and California Department of Toxic Substances Control requirements.
- B. Well Pad Site Cleanup.** The Operator shall leave the site entirely free of oil, rotary mud, oil-soaked earth, asphalt, tar, concrete, litter, debris, and other substances to the satisfaction of DOGGR and the Community Development Director, and in compliance with federal requirements.
- C. Contaminated Materials.** All contaminated soils and materials within the well pad boundaries shall be removed and treated or disposed of in accordance with all local, regional, State, and Federal regulations.
- D. Well Pad Revegetation.** The well pad shall be revegetated following the requirements identified in the revegetation recommendations of the Special Status Species and Habitat Protection Plan to the satisfaction of the Community Development Director.

SECTION 51. CITY REQUEST FOR REVIEW OF WELL STATUS.

The Community Development Director may periodically request the review and status of the Operator's wells. In addition, the Director may submit to DOGGR a list of wells that should be plugged and abandoned as specified in Public Resources Code Section 3206.5 or any subsequently enacted state law related to a local jurisdiction's right to request state-agency review of idle wells. The failure of the Community Development Director to submit a request to DOGGR for a well to be plugged or abandoned shall not result in a waiver of the right to request that the well be plugged and abandoned in the future.

SECTION 52. OIL FIELD ABANDONMENT PROCEDURES.

Within 180 days prior to permanent facility shut down, the Operator shall submit an Abandonment Plan to DOGGR and shall submit to the Community Development Director for review and approval a timeline for facility removal, site assessment, and remediation as necessary. The Operator shall begin abandonment of the site no later than 20 days after the Director's approval of the timeline, and shall provide to the Director quarterly updates on the abandonment process until such time as the Oil Field is abandoned and remediated. Immediately following permanent shut down of the facility, all facilities within the Oil Field shall be removed; the site shall be recontoured and revegetated in accordance with a City-approved plan within one year of shutdown. The Operator shall post a performance bond in an amount determined by the Community Development Director to ensure compliance with all provisions of this Section and the Operator and landowners shall continue to pay property taxes at the rates assessed during Oil Operations until all site restoration work has been fully completed, as determined by the Community Development Director. The Operator, Operator and landowners shall be jointly and severally liable for compliance with this Section. A partial closure of the facility, if feasible, shall be permitted as an interim step to full closure.

SECTION 53. SAFETY INSPECTION, MAINTENANCE, AND QUALITY ASSURANCE PROGRAM (SIMQAP).

Within 180 days of the Effective Date, Operator shall submit to the Community Development Director and Fire Chief for review and approval, a detailed SIMQAP that covers all existing and proposed Oil Operations. The Operator shall ensure that all persons working on the site fully comply with the SIMQAP, and shall provide for involvement of City staff and the City's On-Site Monitor in all inspections. The following provisions relate to the SIMQAP:

- A. SIMQAP Review and Revisions.** The Operator shall periodically review and update the plan to incorporate changes in procedures, and new safety and maintenance technologies. The Operator shall review and revise the plan at least every five years or more frequently if the Operator determines changes are necessary, or if requested by the Community Development Director or the Fire

Chief. Revisions to the SIMQAP shall be submitted to the Community Development Director and the Fire Chief for their review and approval. The Operator shall respond to any request for additional information within 30 days of receiving such request, unless extended by the City.

- B. SIMQAP Requirements.** The SIMQAP shall include but not be limited to the following:
1. Inspection of construction techniques;
 2. Regular maintenance and safety inspections;
 3. Periodic safety audits;
 4. Corrosion monitoring and leak detection; and
 5. Inspections of all trucks carrying hazardous and/or flammable material prior to loading.
- C. Worker Notification.** The Operator shall ensure that all personnel comply with all provisions of the currently approved SIMQAP.
- D. Inspections.** The SIMQAP shall provide for involvement of City staff and the City's On-Site Monitor in all inspections required by this section.

SECTION 54. COMPLIANCE AND SAFETY AUDITS.

At the discretion of the Community Development Director, the Operator may be required to fund a comprehensive third-party Compliance and Safety Audit of all or a portion of the Oil Operations within the jurisdiction of the City. The audit will ensure the safety of Oil Operations and compliance with all federal, state, regional and local laws, rules and regulations. The third-party auditor shall be approved by the Community Development Director and the Fire Chief. In addition to auditing compliance with agency rules and regulations, there shall also be a Comprehensive Facilities Safety Audit for Oil Operations, including all wells and facilities. In addition to the physical condition of the site, operations and procedures manuals for employees and equipment shall be reviewed, as well as manuals addressing emergency planning and procedures. The results of the Compliance and Safety Audits, together with correction action plans for any non-compliance items or unsafe conditions found in the audit, shall be submitted to the Community Development Director and Fire Chief. The corrective action plan shall identify the non-compliance and unsafe items, describe the corrective action to be taken, and provide the timeline for each element of the corrective action. The Operator shall be in violation of the provisions of this section if the Operator fail to complete any corrective action called for by the corrective action plan within the approved time limits specified in the plan, and be subject to penalties as set forth in Section 9.F. The Operator shall submit to the Director monthly updates on the corrective action plan until such time as all corrective actions have been completed.

SECTION 55. COMPLAINTS.

All complaints related to Oil Operations received by the Operator shall be reported on the same business day to the Community Development Director and Fire Chief. Notification of complaints relating to immediate life safety issues shall be made to the affected emergency response agencies no later than 30 minutes after receiving the complaint. In addition, the Operator shall maintain a written log of all complaints and provide that log to the Community Development Director and Fire Chief and other interested parties (i.e. community groups or other interest groups) as identified by the City on a quarterly basis. Depending upon the nature of the complaint, the Operator shall report the complaint to SCAQMD, DOGGR, and any other appropriate agencies with oversight authority regarding the complaint at issue. If the complaint is received after normal business hours, it shall be reported to the Community Development Director and Fire Chief and the agencies at the opening of the next business day.

SECTION 56. COMMUNITY OUTREACH.

Operator shall hold community meetings on an annual basis to provide updates on Oil Operations.

SECTION 57. CONFLICT OF PROVISIONS.

In the event of any conflict between this Ordinance and any other provisions of the CCMC, this Ordinance shall prevail.