

City of Carson Oil Code Update

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CHAPTER 5

OIL AND GAS CODE

Part 1. Administrative Procedures

9500 Purpose

- A. This Chapter shall be known as the Oil and Gas ordinance of the City of Carson.
- B. It is the purpose of this ordinance, amongst other things, to protect the health, safety, public welfare, physical environment and natural resources of the city by the reasonable regulation of petroleum facilities and operations, including but not limited to: exploration; production; storage; processing; transportation; disposal; plugging abandonment and re-abandonment of wells; of operations and equipment accessory and incidental thereto and development and redevelopment of oil fields/sites. It is further the intent of the City that petroleum operations shall be permitted within this city (except where expressly prohibited herein), subject to the application of this Code and all other applicable laws, regulations and requirements.
- C. It is not the intent of this ordinance to regulate public utility operations for the storage or distribution of natural gas. Any drilling, therein, however, shall be subject to this ordinance.

9501 Code Applicability

The regulations in this ordinance shall apply to oil and gas production and related facilities, equipment, structures, or appurtenances including, but not limited to:

- A. Drilling a new well or re-entry of a previously abandoned well for the production of petroleum.
- B. Structures, equipment, or facilities necessary and incidental to either dehydration or separation of oil, gas, and condensate obtained from a hydrocarbon area, or both.
- C. Injection wells and incidental equipment necessary for enhanced oil recovery or injection of produced water.

- D. Equipment and facilities necessary for enhanced oil recovery including waterflooding, steam injection, air injection, carbon dioxide injection, or introduction of polymers, or other well completion techniques.
- E. Pipelines located within an oil and gas lease area that are necessary for oil and gas production operations.
- F. Pipelines that transport oil to a location outside of the oil and gas lease area.
- G. Storage tanks necessary or incidental to separation/treatment of oil and gas, or temporary storage of separated hydrocarbons, and equipment for transfer of the produced hydrocarbons to pipelines or tanker trucks.
- H. Access roads.
- I. Oil spill containment and recovery equipment including central office space and vehicles for the storage of floating oil and water separators, pumps, generators, hosing, assorted absorbent materials, steam cleaners, storage tanks, and other land and wildlife cleanup equipment.
- J. Test wells, including existing test wells that have been in place and functioning prior to City adoption of this ordinance.
- K. Any existing oil facilities within the City that were legally operating prior to certification with this Code but that do not have an active Conditional Use Permit or a development agreement consistent with the requirements of this ordinance.

9502 Allowable Uses

Table 1-1 below specifies what City zoning designations allow for Oil and Gas facilities and, if allowable, what type of authorization is required for the use.

TABLE 1-1

* In addition to the zones listed in the table below, oil and gas facilities shall be permitted in any specific plan area where such uses are specifically allowed in accordance with the requirements of this Code.

**CUP indicates a requirement for a Conditional Use Permit, while DA indicates the requirement for a development agreement.

Zoning Designation	Oil and Gas Facility Permit Required by Zone
Residential	
RS Single Family	Not Permitted
RM Multiple Dwelling	Not Permitted
RA Agricultural	Not Permitted
Commercial	
CN Neighborhood Center	Not Permitted
CR Regional Center	CUP & DA ¹
CG General	CUP & DA ¹
CA Automotive	Not Permitted
MU-CS Mixed Carson St.	Not Permitted
MU-SB Mixed Sepulveda Blvd.	Not Permitted
Industrial	
ML Manufacturing Light	CUP & DA ¹
MH Manufacturing Heavy	CUP & DA ¹
Open Space & Special Uses	
Open Space	Not Permitted
Special Uses	Not Permitted

¹ Development agreement required only for 3 or more total wells on an oil and gas facility site in indicated zones above. See Section 9508. Re-drilling of wells shall be considered a new well for purposes of determining total wells.

9503 Definitions

Unless the context otherwise requires, the definitions hereinafter set forth shall govern the construction of this ordinance.

"Acidizing", also known as **"Acid Well Stimulation Treatment"**, means a well stimulation treatment that uses, in whole or in part, the application of one or more acids, at any pressure, to the well or underground geologic formation. The acid well stimulation treatment may be at any applied pressure and may be used in combination with hydraulic fracturing or other well stimulation treatments. Acid well stimulation treatments include acid matrix stimulation treatments and acid fracturing treatments. Acidizing does not include standard maintenance work or other routine activities that do not affect the integrity of the well or the natural porosity or permeability of an underground geologic formation.

"Air injection" is an enhanced oil recovery process utilizing compressed air that is injected into a reservoir. Oxygen in the gas reacts exothermically with some of the oil, producing highly mobile flue gas. The flue gas advances ahead of the reaction front and achieves an efficient displacement of the in situ oil.

"API" refers to the American Petroleum Institute.

"DOGGR" is that particular division in the Department of Conservation, Division of Oil, Gas and Geothermal Resources, of the State of California.

"Drilling" is any boring into the earth for petroleum operations; but excluding any well drilled solely for the production of fresh water.

"Drill site" means the premises used during the drilling, maintaining, operating and producing of a well or wells located thereon.

"Enforcement action" is any administrative, injunctive, or legal action (either civil or criminal), to enforce, cite or prosecute a violation or efforts to abate or correct a violation (or dangerous or hazardous situation caused by a violation), including investigation, research, legal action, physical abatement, law enforcement and other necessary acts.

"Enhanced oil recovery" is an oil recovery enhancement method using techniques that alter the original properties of oil. The techniques employed during enhanced oil recovery can be initiated at any time during the productive life of an oil reservoir. Its purpose is to improve oil displacement or fluid flow in the reservoir. The three major types of enhanced oil recovery operations are chemical flooding (alkaline flooding or micellar-polymer flooding), miscible displacement (carbon

dioxide [CO₂] injection or hydrocarbon injection), and thermal recovery (steamflood, see "steaming" below). The optimal application of each type depends on reservoir temperature, pressure, depth, net pay, permeability, residual oil and water saturations, porosity and fluid properties such as oil API gravity and viscosity.

"EPA" refers to the Environmental Protection Agency.

"Facilities" include tanks, compressors, pumps, vessels, and other equipment or structures pertinent to oil field operations sited at a single location.

"Fresh water pollution" is the contamination of fresh water, either surface or subsurface, by salt water, mineral brines, waste oil, oil, gas or other deleterious substances, associated with, produced from, obtained or used in connection with the drilling, development, producing, refining, transporting or processing of oil or gas within the City.

"Gas" means any natural hydrocarbon gas coming from the earth.

"Heavier natural gas liquids" refer to the heavier fractions of natural gas liquids which are extracted as a marketable byproduct during oil and gas processing, and consisting of pentanes and heavier (C₅+) such as natural gasoline.

"High risk operation" means an oil or gas production, processing or storage facility which: (a) has been in violation of any applicable section of this ordinance for more than 30 consecutive days and resulted in the issuance of a notice of determination of fines pursuant to Section 9510.3.5 of this ordinance during the preceding twelve months; or (b) has had two separate unauthorized releases of oil, produced water and/or other hazardous materials of a quantity not less than fifteen barrels (six hundred thirty gallons) other than within secondary containment for each incident during the preceding twelve months

"Hydraulic Fracturing" means a well stimulation treatment that, in whole or in part, includes the pressurized injection of hydraulic fracturing fluid into an underground geologic formation in order to fracture or with the intent to fracture the formation, thereby causing or enhancing the production of oil or gas from a well.

"Idle well" is any well that has not produced oil or natural 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.

"Natural gas liquids" (NGLs) refer to those hydrocarbons which are liquefied at the surface in

field activities or in gas processing plants, and include propane, butanes, and heavier fractions. Typical transportation of natural gas liquids can involve liquefied petroleum gases, heavier gas liquids, and unfractionated or raw natural gas liquids.

"NFPA" refers to the National Fire Protection Agency.

"New Development" means the placement or erection of any solid material or structure; change in the density or intensity of use of land, including, but not limited to any other division of land, including lot splits, change in the intensity of use of water, or of access thereto; and the construction, reconstruction, demolition, or alteration of the size of any structure.

"Observation well" is a well used to monitor the operational integrity and conditions in a gas storage reservoir, the reservoir protective area or strata above or below the gas storage horizon.

"Oil" includes petroleum, and **"petroleum"** includes all oil and petroleum resources that can be artificially extracted or otherwise removed from the ground.

"Oil and gas facility" is a primary oil drilling site and all associated operations including pipelines, storage tanks, exploratory facilities (including test wells), drilling facilities, and production facilities.

"Operator" is the person, whether proprietor, lessee or individual contractor, actually in charge and in control of the drilling, maintenance, operation or producing of petroleum from a well or wells.

"OSHA" refers to the Occupational Safety and Health Administration.

"Owner" for purposes of this ordinance, shall refer to the person who owns or controls the mineral rights to exploit, mine and/or produce any or all of the minerals lying below the surface of the property.

"Person" encompasses any individual, firm, association, corporation, joint venture or any other group or combination acting as an entity.

"Petroleum" is crude oil, natural gas and petroleum derivatives.

"Petroleum Administrator" is the administrative official, and the Petroleum Administrator's designated assistants, inspectors and deputies having the responsibility for the enforcement of this ordinance.

"Petroleum operations" are all activities in connection with the exploration, drilling for and the

production of petroleum, gas and other hydrocarbons, together with all incidental equipment and appurtenances thereto.

"Pipelines," for the purposes of this ordinance, shall mean all flow lines for the transportation of hydrocarbons or their by-products or of materials used in the production of unrefined hydrocarbons.

"Production facility" means any equipment attendant to oil and gas production or injection operations including, but not limited to, tanks, flowlines, headers, gathering lines, wellheads, heater treaters, pumps, valves, compressors, injection equipment, and pipelines that are not under the jurisdiction of the State Fire Marshal pursuant to Section 51010 of the Government Code.

"Produced water" is water produced with oil and gas.

"PSM" refers to process safety management.

"Pure Tones" Noise in which a single frequency stands out contains a "pure tone." A pure tone shall exist if the one-third octave band sound-pressure level in the band with the tone exceeds the arithmetic average of the sound-pressure levels of the two contiguous one-third octave bands by 5 dB for center frequencies of 500 Hertz and above, and by 8 dB for center frequencies between 160 and 400 Hertz, and by 15 dB for center frequencies less than or equal to 125 Hertz. Sources that produce pure tones are often described as being "tonal" and tend to be more noticeable, and potentially annoying, to humans than sources that do not contain pure tones.

"Redevelopment" for the purposes of this ordinance is the development of all of a portion of a current or former oil or gas facility site to another authorized use other than petroleum operations.

"Re-drilling" is the deepening of an existing well or the creation of a partial new well bore some distance below the surface of the earth, including the re-drilling of abandoned wells.

"Re-entry" is the process of cleaning a plugged and abandoned well by drilling, jetting, or other method.

"Regional Water Quality Control Board" shall mean the Los Angeles Regional Water Quality Control Board.

"RMP" refers to a Resource Management Plan.

"Secondary recovery operations" is any operation where the flow of hydrocarbons into a well are aided or induced with the use of injected substances including but are not limited to the

introduction of or subsurface injection of water or gas.

"Secondary containment" means containment, which is external to and separate from the primary containment, typically constructed of masonry block walls.

"Shut down order" is an order by the Petroleum Administrator, fire marshal, or DOGGR official, to restrict or prohibit certain (or all) functions or operations at a facility or by an owner or operator pursuant to authority of this ordinance.

"SPCC" refers to Spill Prevention, Control, and Countermeasures.

"Steam Injection" is a method of thermal recovery in which steam generated at surface is injected into the reservoir through injection or production wells. When steam enters the reservoir, it heats up the crude oil and reduces its viscosity. Cyclic steaming involves the alternating steam injection and subsequent oil production from the same well.

"Steaming" or "Cyclic Steaming" See Steam Injection.

"Structure" is any object that is built or constructed; a tank, edifice or building of any kind or any piece of work artificially built up or composed of parts joined together in some definite manner.

"Supervisor" means the DOGGR Supervisor.

"Tank setting" shall mean the area on a lease where tanks are located for collecting, testing, treating and/or shipping crude oil or other fluids incidental to petroleum operations.

"Test well" means any well drilled to extend a field or explore a new, potentially productive reservoir.

"USEPA" refers to the United States Environmental Protection Agency.

"Regional Water Quality Control Board" shall mean the Los Angeles Regional Water Quality Control Board.

"Waterflooding" is a method of secondary recovery in which water is injected into the reservoir formation to displace residual oil. The water from injection wells physically sweeps the displaced oil to adjacent production wells.

"Well" any oil or gas well or well for the discovery of oil or gas; any well on lands producing or reasonably presumed to contain oil or gas; any well drilled for the purpose of injecting fluids or gas for stimulating oil or gas recovery, repressuring or pressure maintenance of oil or gas

reservoirs, or disposing of waste fluids from an oil or gas field; any well used to inject or withdraw gas from an underground storage facility; or any well drilled within or adjacent to an oil or gas pool for the purpose of obtaining water to be used in production stimulation or repressuring operations; but excluding any well drilled solely for the production of fresh water.

"Well site" means the premises used during the maintaining, operating and producing of a well or wells located thereon.

"Well stimulation treatment" is any treatment or process of a well designed to enhance oil, gas or other hydrocarbon substance production or recovery by increasing the permeability of the underground geologic formation. Well stimulation treatments include, but are not limited to, hydraulic fracturing, acid fracturing, and acid matrix stimulation. A treatment at pressure exceeding the formation fracture gradient shall be presumed to be a well stimulation treatment unless it is demonstrated to DOGGR's satisfaction that the treatment, as designed, does not enhance oil and gas production or recovery by increasing the permeability of the formation. A treatment that involves emplacing acid in a well and that uses a volume of fluid equal to or greater than the Acid Volume Threshold (as defined by DOGGR) for the operation shall be presumed to be a well stimulation treatment unless it is demonstrated to DOGGR's satisfaction that the treatment, as designed, does not enhance oil and gas production or recovery by increasing the permeability of the formation. Well stimulation treatment does not include routine well cleanout work; routine well maintenance; routine treatment for the purpose of removal of formation damage due to drilling; bottom hole pressure surveys; routine activities that do not affect the integrity of the well or the formation; the removal of scale or precipitate from the perforations, casing, or tubing; a gravel pack treatment that does not exceed the formation fracture gradient; or a treatment that involves emplacing acid in a well and that uses a volume of fluid that is less than the Acid Volume Threshold (as defined by DOGGR) for the operation and is below the formation fracture gradient.

"Workover" is the process of performing major maintenance or remedial treatments on an oil or gas well. In many cases, workover implies the removal and replacement of the production tubing string after the well has been killed and a workover rig has been placed on location. Through-tubing workover operations, using coiled tubing, snubbing or slickline equipment, are routinely conducted to complete treatments or well service activities that avoid a full workover where the tubing is removed.

9504 Copies of Adopted Codes and Referenced Publications

This ordinance, insofar as it regulates petroleum operations also regulated by the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), is

intended to supplement such state regulations and to be in furtherance and support thereof. In all cases where there is conflict with state laws or regulations, such state laws or regulations shall prevail over any contradictory provisions, or contradictory prohibitions or requirements, made pursuant to this ordinance.

9505 Position of Petroleum Administrator

A. The Petroleum Administrator is authorized and directed to enforce the provisions of this ordinance and the codes adopted by reference herein. For such purpose, the Petroleum Administrator shall have the powers of a law enforcement officer. The Petroleum Administrator shall be appointed by the City Manager and subject to the City Manager's authority under Section 2107 of this Code. The Petroleum Administrator is hereby authorized to consult experts qualified in fields related to the subject matter of this ordinance and codes adopted by reference herein as necessary to assist the Petroleum Administrator in carrying out duties. The decisions of the Petroleum Administrator in enforcing, interpreting, or in exercising the authority delegated by the provisions of this ordinance and of the codes adopted hereby shall be deemed final.

B. The Petroleum Administrator shall have the primary responsibility for enforcing the provisions of this ordinance. In the event the Petroleum Administrator is unable to obtain compliance with any of the terms and provisions of this ordinance, or of any resolution of the City Council adopted pursuant thereto, the Petroleum Administrator may order immediate cessation of operations. If such operations are not stopped or if resumed prior to written approval of the Petroleum Administrator, the Petroleum Administrator may request civil action by the City Attorney as authorized by this Code or law, or criminal prosecution by the office of the district attorney, or both.

C. The Petroleum Administrator shall be authorized to appoint such number of officers, inspectors, assistants and other employees for the petroleum unit as shall be authorized by the City Manager subject to Section 2107 of this Code. The Petroleum Administrator may deputize such employees as may be necessary to carry out the functions of the petroleum unit.

9506 Drilling Permit

Prior to any drilling of test or production wells the operator must receive a drilling permit from the Petroleum Administrator, which indicates that the Petroleum Administrator has reviewed and approves of the operator's proposed drilling plans.

9507 Required Procedures for Conditional Use Permits

A. Each drilling, or re-drilling, project to which this ordinance applies is required to receive a Conditional Use Permit (CUP), from the City Planning Commission in order to receive authorization for, and proceed with, the operation of an oil and gas facility, including but not limited to any site development, or resource extraction.

B. All procedures for CUPs to which this ordinance applies shall be consistent with the Article IX, Chapter 1, Part 7 of the Code as well as with the following additional requirements:

9507.1 Conditional Use Permit (CUP) Filing Requirements

In addition to the filing requirements required by Section 9173.1 (Applications) of this Code, for projects within the City to which this ordinance is applicable, the following materials are also required as part of a CUP application for the consideration of the Planning Commission, or the City Council on appeal:

- A. A complete statement of the proposed project.
- B. A new emergency response plan or updated emergency response plan to deal with potential consequences and actions to be taken in the event of floods, earthquakes, hydrocarbon leaks or fires. The emergency response plan shall be approved by the City's Public Safety and Community Services Manager and the Los Angeles County Fire Department.
- C. A phasing plan for the staging of development that includes the estimated timetable for project construction, operation, and completion, as well as, where applicable, the location and amount of land reserved for future expansion.
- D. A site plan showing:
 - 1. Property, easement, and pipeline right-of-way boundaries.
 - 2. Proposed road construction or modification.
 - 3. Area to be used for construction.
 - 4. Area to be used for access and maintenance during pipeline operation.
 - 5. Existing roads, watercourses, and pipelines within the pipeline right-of-way.
 - 6. Location and type of existing and proposed structures within 50 feet of the pipeline right-of-way.

7. Location of existing and proposed wells and petroleum or gas containing equipment and their measured distance from nearby uses, including the closest residential or school property line.
 8. Location of all abandoned or idle wells in the field.
 9. Proposed alteration of surface drainages.
 10. A contour map showing existing and proposed contours.
 11. A plan for parking on or off site.
- E. Plans with measures to be used to prevent or reduce nuisance effects (e.g., dust, fumes, glare, noise, odor, air pollutants, and vibration) and to prevent danger to life and property.
- F. If construction is involved in the proposed project, a construction Best Management Practices (BMP) plan.
- G. Estimates of the amount of cut and fill required by the proposed project.
- H. A plan for a community alert system to automatically notify area residences and businesses in the event of an emergency at oil or gas facilities that would require residents to take shelter or take other protective actions.
- I. If any grading is proposed that results in the loss of vegetated, sandy, permeable ground areas, which could alter surface runoff at the site a site-specific hydrologic analysis shall be completed by the operator and submitted to the Petroleum Administrator to evaluate anticipated changes in drainage patterns and associated increased runoff at the site.
- J. If the site is within 1,000 feet of a sensitive noise receptor, or if the Petroleum Administrator determines it is necessary, a quiet mode operation plan which includes, but is not limited to, the following noise reduction measures:
1. Using signalers for all backup operations instead of backup alarms and turning off backup alarms;
 2. Using radios instead of voice communication;
 3. Minimizing crane use and pipe handling operations, pipe offloading from trucks and board loading to the maximum extent feasible and nighttime loading only for safety reasons;

4. Prohibiting material and supply deliveries to the Project Site between the hours of 6 p.m. and 8 a.m. on weekdays and prohibiting deliveries on weekends and holidays, with exceptions only for safety; and
 5. Limiting process alarms and communications over the broadcast system to the maximum extent feasible during all operations and use only for safety reasons.
- K. A photometric analysis, which compares the baseline of the existing light measurements with the proposed light spill that will result from the oil and gas facility.
- L. An Environmental Quality Assurance Program ("EQAP"). (Ref. Section 9529.1).
- M. Other information as deemed reasonably necessary by the Petroleum Administrator.

9507.2 Processing and Review

Processing of CUP's shall be consistent with California's Permit Streamlining Act requirements.

- A. The applicant may apply for:
1. The drilling operations only;
 2. The production facilities only; or
 3. Both the drilling and production facilities.
- B. The Petroleum Administrator will review the submitted application(s) for completeness in compliance with the filing requirements of Section 9507.1 and any other applicable sections of the Code, and shall refer the filed CUP to appropriate City departments or local and state agencies, as appropriate, for review and comment.

9507.3 Findings and Permitting Conditions

- A. In addition to the requirements of Section 9172.21D (Commission Findings and Decision), the Planning Commission shall approve a Conditional Use Permit only if it is able to make affirmative findings of the following criteria:
1. The proposed project will be in conformance with requirements of other local, regional, or State entities;
 2. The project will not be detrimental to the comfort, convenience, health, safety, and general welfare of the community, and will be compatible with the uses in the surrounding area;

3. The project will be in compliance with the Development Standards contained in Part 2 of this ordinance, commencing with Section 9521; and
 4. The project will not result in an increased level of freshwater pollution or groundwater contamination in the immediate area or cause regulatory water standards at an existing water production well to be violated as defined in the California Code of Regulations, Title 22, Division 4, Chapter 15 and in the Safe Water Drinking Act, as they may be amended.
 5. Any existing non-conforming oil facilities located on the proposed project site will already be in conformity, or will be brought into conformity, with all applicable provisions of this ordinance.
- B. As a condition of approval of CUP, the Planning Commission may impose appropriate conditions as deemed reasonable and necessary to find consistency with the findings 1 through 5 above.

9507.4 Modifications and Extensions

- A. The provisions of Section 9172.21 shall apply for all modifications or extensions requested for petroleum operations.
- B. Any petroleum operation in existence and lawfully operating when this ordinance becomes effective, that does not have a CUP or DA for the operation, shall be subject to all of the requirements of this ordinance for any new development or modification of use at the existing facility that requires the issuance of a permit by the City.

9507.5 Change of Ownership Criteria

- A. Listing on Permit. Any person who owns or operates an oil or gas facility that is subject to this ordinance shall be listed as a permittee on the permit(s) issued for that facility. Any guarantor for such facility shall be listed on the applicable permit(s), identifying its responsibilities as guarantor. If any owner, operator, or guarantor is a partnership, all partners shall be listed on the permit and the managing partner shall be identified in this list.
- B. Acceptance of Permit. Prior to being listed on a permit, any owner or operator of a oil or gas facility that is subject to this ordinance shall provide the City with a letter from a authorized agent or officer of the owner or operator formally accepting all conditions and requirements of the permit. This provision shall not apply to fractional interest owners that are not managing partners.

- C. Permits Not Transferable. Any CUP issued or authorized pursuant to this Code, for a oil or gas facility that is subject to this ordinance shall not be transferable, whether by operation of law or otherwise, from any existing owner, operator, or guarantor to a new owner, operator, or guarantor, except in accordance with this ordinance.
- D. Ongoing Notification. All owners, operators, and guarantors shall, as an ongoing requirement, notify the Petroleum Administrator in writing of any change in the information required by this Section within thirty days of such change.
- E. Change of Owner. Any change of owner, merger of the owner with another company, or change of form of business organization, shall require application and approval as provided in this ordinance. Until a change of owner is approved pursuant to this ordinance, the former owner(s) shall continue to be liable for compliance with all terms and conditions of the permit and any applicable requirements of this Code.
- F. Change of Operator. A change of operator shall require an application filed with the City within thirty days prior to a change of operator. An application is not required when the change of operator does not entail a substantive change to operations or personnel of the oil or gas facility as determined by the Petroleum Administrator.
- G. Change of Guarantor. Any change of guarantor, including merger of the guarantor with another company or change of form of business organization, shall require application and approval as provided in this ordinance. Until a change of guarantor is approved pursuant to this ordinance, the former guarantor(s) listed on the permit shall continue to be liable for compliance with all terms and conditions of the permit and any applicable Section of the Code.
- H. Liability for Compliance with Permit Conditions. Any owner, operator or guarantor listed on a permit pursuant to this ordinance shall comply with all conditions of such permit, as applicable, to owners, operators and guarantors. Failure to comply with such permit conditions shall subject the owner, operator or guarantor to the applicable penalty and enforcement provisions of this Code or other applicable ordinance for such permits.
- I. Liability for Abandonment. The current owner or operator, as determined by the records of the Petroleum Administrator, of a facility subject to this ordinance shall be responsible for the proper abandonment of the facility. If the Petroleum Administrator determines that the current owner or operator does not have the financial resources to fully cover the cost of abandoning the facility, the immediately preceding owner or operator shall also be responsible for the cost of abandoning the facility.

If the immediately preceding owner or operator also does not have sufficient financial resources,

the Petroleum Administrator may continue to look serialim to previous owners or operators until an owner or operator, or a combination of owners or operators, is found that the Petroleum Administrator determines have the financial resources to cover the cost of abandoning the facility.

9508 Procedures for Development Agreements

Each drilling project to which this ordinance applies that includes 3 or more total wells¹ on a oil and gas facility site will require a development agreement (DA) between either the owner or operator, or both, and the City. Any re-drilling of wells shall be considered a new well for the purposes of calculating total wells subject to the requirements for a DA. The procedures for development agreements will comply with Government Code Division 1, Chapter 4, Article 2.5 and the following additional requirements:

9508.1 Filing Requirements

A. Only a qualified applicant may file an application to enter into a development agreement. A qualified applicant is a person(s) who has the entire legal interest in the real property of the oil or gas facility site, or a person(s) who has the entire equitable interest in the real property for the gas or oil facility site and is joined by the legal interest holder in the application. The qualified applicant shall provide proof of ownership interest, including any oil and gas leases, in any mineral rights associated with the petroleum operation. The applicant shall provide to the Petroleum Administrator proof of interest in the real property in the form of a title report by a California title insurance company and proof of the authority of the agent or representative, to act for the applicant. Said proof of interest and proof of authority shall be subject to review and approval by the City Attorney.

B. The Petroleum Administrator shall prescribe the form for each application, notice and documents provided for or required under these regulations for the preparation and implementation of development agreements. The applicant shall complete and submit such an application form to the Petroleum Administrator, along with a deposit for the estimated direct and indirect costs of processing the development agreement. The applicant shall deposit any additional amounts for all costs and fees to process the development agreement, including all legal fees, within 15 days of request by the Petroleum Administrator. Upon either completion of the application process or withdrawal of the application, the City shall refund any remaining deposited amounts in excess of the costs of processing.

¹ For purposes of this Section "total wells" shall mean the cumulative number of existing and proposed wells on an oil and gas facility site.

C. The Petroleum Administrator may require an applicant to submit such information and supporting data as the Petroleum Administrator considers necessary to process the application.

D. A community benefit assessment to evaluate the benefits the DA will provide to the community.

9508.2 Processing and Review

A. The Petroleum Administrator shall endorse on the application the date it is received. An application or related document shall not be complete until an estimated deposit for the cost of processing has been paid to the City. If within 30 days of receiving the application the Petroleum Administrator finds that all required information has not been submitted or the application is otherwise incomplete or inaccurate, the processing of the application and the running of any limits shall be suspended upon written notice to the applicant and a new 30 day period shall commence once the required material is received by the Petroleum Administrator. If the Petroleum Administrator finds that the application is complete it shall be accepted for filing. The Petroleum Administrator shall review the application and determine the additional requirements necessary to complete processing of the agreement. After receiving the required information and the application is complete, the Petroleum Administrator shall prepare a staff report and recommendation to the Planning Commission and City Council stating whether or not the agreement as proposed or in an amended form would be consistent with policies of the City, this Code and any applicable general or specific plan. The City Attorney shall review the proposed development agreement as to legal form.

B. Notice of a hearing regarding the development agreement must be given by the Petroleum Administrator and comply with the requirements of Government Code Section 65867, as may be amended, as well as in the manner set forth in Section 9173.22 Article IX, Chapter 1, Part 7 of the Code, except that the Petroleum Administrator, not the Director, shall be responsible for providing notice.

C. The Planning Commission shall review the proposed development agreement and provide a recommendation to the City Council to approve, approve with modifications or deny the proposed development agreement. If the Planning Commission fails to take action within 60 days of opening the hearing on the matter, it shall be deemed to have made a recommendation of denial to the City Council unless the applicant has requested an extension of time, either in writing or on the record, which has been approved by the Planning Commission prior to the running of the 60th day.

D. The proposed development agreement shall be set for hearing and consideration before the Council within 60 days of the recommendation of the Planning Commission, unless the applicant agrees in writing to an extension of time with the Petroleum Administrator prior to the matter being heard by the Council.

E. Within 10 calendar days after the City enters into the development agreement, the City Clerk shall have the agreement recorded with the County Recorder. If the parties to the agreement or their successors in interest amend or cancel the agreement as provided in Government Code Section 65868, or if the City terminates or modifies the agreement as provided in Government Code Section 65865.1 for failure of the applicant to comply in good faith with the terms or conditions of the agreement, the City Clerk shall have notice of such action recorded with the County Recorder.

9508.3 Findings and Development Agreement Conditions

A. After the City Council completes the public hearing, it may not approve the development agreement unless it finds that the provisions of the agreement:

1. Are consistent with the goals, objectives, and policies of the general plan and any applicable specific plan;
2. Are compatible with the uses authorized in, and the regulations prescribed for the zoned district in which the real property is located;
3. Are in conformity with public convenience, general welfare and good land use practice;
4. Will not be detrimental to the health, safety and general welfare of the community;
5. Will not adversely affect the orderly development of property or the preservation of property valued; or
6. Provides for a penalty for any violation of the development agreement consistent with the provisions of Section 9514.

9508.4 Modifications and Extensions

A. The provisions of Government Code Section 65868 shall apply for all modifications, extensions or other amendments of the terms of a development agreement subject to this ordinance.

B. Any oil and gas facility operation in existence and lawfully operating prior to the adoption of this ordinance, that does not have a CUP or development agreement for the operation shall be required to comply with this ordinance for any new development or modification of uses at the existing oil and gas facility that would require a CUP or a development agreement.

C. Either party may propose an amendment or termination of an approved development agreement subject to the following:

1. The procedure for amending or terminating, the development agreement is the same as the procedure for entering into an agreement in the first instance.
2. If the City initiates the proposed amendment to or cancellation in whole or in part of the development agreement, it shall first give notice to the parties to the development agreement of its intention to initiate such proceedings at least 30 calendar days in advance of the giving of notice of intention to consider the amendment or cancellation.

9509 Periodic Review

The City may choose to conduct a comprehensive review of a CUP or DA every five years from the date of approval to determine if the project and the associated CUP or DA are adequately mitigating significant environmental impacts caused by the drilling and operations, and consider adding reasonable conditions, which incorporate proven technological advances, as deemed appropriate through City review. Nothing in this section shall limit the City's authority to conduct a review at more frequent intervals, engage in mitigation monitoring as required by CEQA, or otherwise act as directed or authorized by law.

A. Within 30 days from the request by the City, the operator shall deposit to the City the funds necessary for the City to retain a third party entity to prepare a periodic review, which includes operational records, and analysis of the effectiveness of this ordinance, enforcement activity, and any other issues associated with potentially adverse effects of oil and gas facility operations. A periodic review will be funded by the operator every 5 year period following approval. If the periodic review identifies significant deficiencies in the CUP or DA that are resulting in unmitigated adverse impacts then the Petroleum Administrator may identify these deficiencies and bring forward recommendations of corrective actions to the Planning Commission.

B. A CUP or DA may also be reviewed by the Petroleum Administrator at any time, if more than three violations occur within a twelve month period and the Petroleum Administrator determines that resolution of the violations may be addressed by an amendment to the CUP or

DA. The Petroleum Administrator shall make a recommendation of amendments to the Planning Commission for CUPs and the City Council for Das, as reasonably deemed necessary.

9510 Site or Well Abandonment, Well re-abandonment, Restoration and Redevelopment of the Site Procedures

The following provisions shall be implemented for oil or gas facility site, site or well abandonment, well re-abandonment, restoration and redevelopment of site procedures:

9510.1 Purpose and Intent

A. Section 9510 et seq. establishes procedures to achieve the timely abandonment of applicable land uses, and following the abandonment, the timely and proper removal of applicable oil and gas facilities, reclamation and remediation of host sites, and final disposition of pipelines, in compliance with applicable laws and permits. This Section also establishes procedures for abandonment and re-abandonment of individual well(s), in compliance with applicable laws and permits, where petroleum operations will be continuing at the oil and gas facility site. Finally, this Section establishes redevelopment procedures.

B. The procedures ensure appropriate due process in differentiating idled from abandoned facilities and protecting the vested rights of permittees while also ensuring that facilities with no reasonable expectation of restarting are removed, in compliance with the intent of abandonment permits. The procedures also ensure a process for abandoning or re-abandonment of facilities where petroleum operations will continue at the site, as well as procedures for redevelopment of a site to another use.

C. Timely abandonment, re-abandonment, remediation, reclamation and redevelopment provide a public benefit by avoiding unnecessary delays in the removal of applicable oil and gas facilities and the restoration of any residual contamination that may result during operations, and providing an effective means of mitigating several significant environmental and socioeconomic effects, including aesthetics, compatibility with surrounding land uses, contamination from leaking abandoned wells, public health and safety for future non-petroleum uses at the site, and risk of default on demolition and reclamation obligations by the permittee.

9510.2 Applicability

Oil and gas development subject to this ordinance shall include all permitted uses identified in Section 9502 of this Code, or those sites that at one time handled, natural gas, natural gas liquids, oil, produced water, or waste water that originated from a petroleum reservoir, regardless of whether these uses were permitted in compliance with this ordinance or any preceding ordinance. This includes, all pipeline systems, except for public utility natural gas transmission

and distribution systems, that either transport or at one time transported natural gas, oil, produced water, or waste water that originated from a reservoir, regardless of whether these uses were permitted in compliance with this Code or any preceding ordinance.

9510.3 Application Process

The procedures for processing an abandonment, re-abandonment, and site restoration permit shall utilize the notice, hearing and appeal process for a Conditional Use Permit as detailed in Article IX, Chapter 1, Part 7 of the Code. For any item required to be submitted less than 180 days in advance, the Petroleum Administrator has the discretion to process and approve the application. Any person may submit an appeal to the Petroleum Administrator or the Planning Commission within 15 days of the Petroleum Administrator's notice of decision consistent with Section 9173.4. Mandatory requirements of the Code are not subject to appeal. All procedures shall be consistent with the following requirements:

9510.3.1 Requirement to File an Application

- A. **Complete Abandonment of Petroleum Operations:** The owner or operator shall submit an application to the Petroleum Administrator upon intentional abandonment of the entire petroleum operation or facility. The application for abandonment and site restoration proceedings shall be submitted 180 calendar days prior to the planned shutdown of all the facilities.
- B. **Partial Abandonment of Petroleum Operations:** If any portion of the oil or gas facility is being abandoned, or if a well is being re-abandoned, the owner or operator shall submit an application to the Petroleum Administrator for partial abandonment of petroleum operations. Said application shall be submitted not later than 30 calendar days prior to abandonment or re-abandonment of wells involving less than 10% of the total number of wells on site or 10 wells, whichever is more; all other applications shall be submitted not later than 180 calendar days prior to abandonment, re-abandonment or restoration.
- C. **Redevelopment of a Former Gas or Oil Site:** If redevelopment of a use other than a petroleum operation is proposed at a completely or partially abandoned oil or gas facility site, the owner or applicant shall submit an application to be processed as either a Site Plan or Conditional Use Permit consistent for that use under Chapter 1, Article IX of this Code. Said application shall include the content required by Section 9510.3.2, and the Site Plan or Conditional Use Permit shall comply with the development standards of Section 9537.
- D. **Other Events Requiring an Application.** The owner or operator land use shall submit an application for abandonment, re-abandonment, and site restoration proceedings to the Petroleum Administrator upon any of the following:

1. Any event or condition designated in an existing City permit or entitlement that would require consideration of abandonment. The Application shall be submitted 90 days in advance of the event or condition. If the event or condition cannot be known until after it occurs, the application must be submitted within 15 days of the event or condition.
2. The permitted land use or an independent business function of a permitted land use has become idle in that it has not been used for six consecutive months of continuous operations during a five year period or longer. The application shall be submitted 180 days prior to the expiration of the five year period.
3. Upon the revocation, expiration, or failure to obtain or maintain in full force and effect permits required by the provisions of this ordinance. The application shall be submitted within 30 days of the revocation, expiration or failure to obtain or maintain such a required permit.
4. Upon order of DOGGR. The application shall be submitted within 30 days of a DOGGR order to abandon, re-abandon, and restore the site.
5. Detection of a leak of an abandoned or re-abandoned well. The application shall be submitted as soon as possible, but not later than 30 days of knowledge of the leak by the owner or operator, regardless whether notice is obtained through a leak test conducted consistent with Section 9537(C) or through other means.

9510.3.2 Content of Application

The application shall be in a form and content specified by the Petroleum Administrator and this Section. The application shall contain the following:

- A. Name, address, and contact information for the permittee.
- B. Name, address, and general description of the permitted land use.
- C. Gross and net acreage and boundaries of the subject property.
- D. Location of all structures, above and underground, proposed to be removed.
- E. Location of all structures, above and underground, proposed to remain in-place.
- F. Locations of all structures, above and underground, proposed for development

- G. Location of all wells, including active, idled, abandoned or re-abandoned wells, including distances from site boundaries, and existing and proposed structures. Each well shall include the DOGGR well name and number, as well as the American Petroleum Institute (API) well number. If available, the location of the wells shall be identified with the name of the operator and well designation. Redevelopment of all or a portion of a former gas or oil site for use other than a petroleum operation shall also require a licensed survey of all wells within the area of development and include the North American Datum of 1983 (NAD 83) well location or equivalent.
- H. An American Land Title Association (A.L.T.A) survey of the site, showing all improvements, easements, rights-of-way, and other elements impacting the ownership of land.
- I. Location of all utilities on the subject property.
- J. Location of all easements on or adjacent to the subject property that may be affected by demolition or reclamation.
- K. To the extent known, the type and extent of all contamination and proposed remedial actions to the level of detail that can be assessed through environmental review. This information does not require a new or modified Phase 2 site assessment in advance of any requirement by the Fire Department or State agencies with regulatory oversight of site assessments.
- L. Location of areas of flood, geologic, seismic, and other hazards.
- M. Location of areas of archeological sites, habitat resources, prime scenic quality, water bodies, and significant existing vegetation.
- N. Location and use of all structures within 100 feet of the boundaries of the subject property.
- O. A proposed abandonment, re-abandonment and restoration plan that details the activities for the proposed action, including the following details: hours of operation, estimated number of workers required on site to decommission facilities and structures or to otherwise abandon or re-abandon wells, disposition of equipment and structures proposed for decommissioning, projected method and routes of transporting equipment, structures, and estimated debris from the site to the place of disposition as well as the number of trips required, and an estimated schedule for decommissioning the facilities or completion of the work.
- P. A proposed waste-management plan to maximize recycling and minimize wastes.

- Q. Other permit applications that may be required by the Code to retain any existing structures, roadways, and other improvements to the property that were ancillary to the oil or gas operations and are proposed to be retained to support other existing or proposed uses of the property following abandonment of the oil or gas operations.
- R. A proposed grading and drainage plan.
- S. A proposed plan to convert the site to natural condition or convert to other proposed land use, including a detailed schedule for restoring the site. In the latter case, include other applicable permit applications required, if any, for the proposed land use.
- T. A statement of intent regarding the disposition of utilities that served the oil and gas operations, including fire protection, power, sewage disposal, transportation, and water.
- U. Measures proposed to be used to prevent or reduce nuisance effects (e.g., dust, fumes, glare, noise, odor, smoke, traffic congestion, vibration) and to prevent danger to life and property.
- V. A copy of DOGGR approval to abandon, re-abandon or remediate well(s).
- W. A leak test report for each abandoned or re-abandoned well(s) on the site that meets the requirements of Section 9537(C) and has been accepted by the Petroleum Administrator within the past 24 months.
- X. For abandonment, re-abandonment or restoration in any circumstances where the permit is approved by the Petroleum Administrator, proof of mailed notice of intent to seek a permit to abandon, re-abandon or restore to the owner of record on the latest assessment roll for neighboring parcels within 500 feet of the oil and gas facility site property boundaries. The notice shall generally describe the scope of the activity being proposed.
- Y. Any other information deemed reasonably necessary by the Petroleum Administrator to address site-specific factors.

9510.3.3 Permitting Specifications

A. Application Filing. The Petroleum Administrator shall process complete applications for permits after determining the applications to be complete in compliance with Section 9510.3.2 of this Code, and submit applications subject to initial Planning Commission review to the Planning Commission with a recommendation regarding approval if the findings in Section 9510.3.4 are met. An application shall not be complete unless the applicant has made a deposit for the estimated direct and indirect costs of processing the application. The applicant shall deposit any additional amounts for the costs to process the application, including legal review, within 15 days

of request by the Petroleum Administrator. Upon either completion of the permitting process or withdrawal of the application, the City shall refund any remaining deposited amounts in excess of the direct and indirect costs of processing.

B. Independent or concurrent processing of applications. For applications subject to initial Planning Commission review, the Planning Commission shall process complete applications for abandonment and site restoration permits independently of any other permit applications to develop the site in question, unless the Petroleum Administrator makes the determination that the concurrent processing of abandonment and site restoration permits and development permits for the same site do not unduly hinder timely restoration of abandoned sites or result in long delays in securing approval of development permits.

C. Demolition and restoration permit shall supersede. Upon approval of a demolition and restoration permit subject to initial approval by the Planning Commission, or upon abandonment of operations, whichever occurs later, the demolition and reclamation permit shall supersede any discretionary permit approved for construction and operation of the facilities.

D. Conditions of Permit: In addition to any other requirements of this Code, any permit for abandonment, re-abandonment or restoration shall be subject to the following requirements regardless whether initially approved by the Petroleum Administrator or the Planning Commission:

1. Oil well abandonment shall be performed by oil service company contractors licensed to do business in the city.
2. All equipment and surface installations used in connection with the well which are not necessary, as determined by the Petroleum Administrator or Planning Commission, for the operation or maintenance of other wells of on the drill or operation site shall be removed from the site.
3. The abandoned or re-abandoned well site or portions of the oil and gas facility shall be restored to its original condition or as nearly as is practical given the nature of the location and continuing uses for oil and gas facility site.
4. All sumps, cellars, and ditches which are not necessary for the operation or maintenance of other wells of on the oil or gas facility site shall be cleaned out and all oil, oil residue, drilling fluid, and rubbish shall be removed or bio-remediated to reduce hydrocarbons to standards acceptable to federal, state, or local agencies. All sumps, cellars, and ditches shall be leveled or filled. Where such sumps, cellars, and

ditches are lined with concrete, the owner or operator shall cause the walls and bottoms to be broken up and all concrete shall be removed.

5. The portions of the site not necessary for continuing oil or gas facility operations shall be cleaned and graded and left in a clean and neat condition free of oil, rotary mud, oil-soaked earth, asphalt, tar, concrete, litter, and debris.
6. All public streets, alleys, sidewalks, curbs and gutters, and other places constituting public property which may have been disturbed or damaged in connection with any operation, including operations for the abandonment or re-abandonment of the well shall be cleaned, and, except for ordinary wear and tear, shall be repaired and restored to substantially the same condition thereof as the same existed at the time of issuance of the permit, or at the time operations were first commenced in connection with the drilling, operation, or maintenance of the well.
7. A copy of written approval of DOGGR confirming compliance with all state abandonment proceedings for all abandoned facilities must be furnished to the Petroleum Administrator.
8. Proposed restoration will leave the subject site in a condition that is compatible with any existing easements or dedications for public access through, or public use of a portion of the property.
9. Prior to issuance of the permit, the owner shall record declaration of a covenant, in a form subject to the review and approval of the City Attorney, putting future owners and occupants on notice of the following: the existence of abandoned oil wells on the site; that the wells within the site have been leak tested and found not to leak; description of any methane mitigation measures employed; disclosure that access to these wells has been provided to address the fact that they may leak in the future causing potential harm; acknowledgment that the state may order the re-abandonment of any well should it leak in the future; acknowledgment that the state does not recommend building over wells; and releasing and indemnifying the City for issuing any project permit or entitlement for the project. The covenant shall run with the land, apply to future owners, and may only be released by the City.

9510.3.4 Findings Required for Approval

In addition to the findings specified in 9172.21 of the Code, for permits the Petroleum Administrator or Planning Commission shall also make affirmative findings based on the following criteria:

A. The subject site will be restored and remediated to its pre-project natural conditions unless areas within the site are subject to approved development, in which case restoration and landscaping of these areas will conform to the permitted development. In cases where development is proposed but not yet permitted, restoration of affected areas to natural conditions may be waived by the Planning Commission; provided, the development is permitted within five years and the permittee has posted financial assurances acceptable to the Petroleum Administrator to ensure restoration to natural conditions if the proposed development is not permitted.

B. The proposed restoration will leave the subject site in a condition that is compatible with any existing easements or dedications for public access through, or public use of a portion of the property

C. The permit conditions comply with Section 9510.3.3 and contain specific enforceable requirements to ensure the timely completion of any abandonment or re-abandonment of wells, restoration activities or cessation of other oil and gas facility operations subject to the permit.

9510.3.5 High-risk Operations

A. Upon determination that any petroleum production, processing or storage operation meets the definition of high risk operation from section 9503, the Petroleum Administrator shall give the owner and operator written notice of the Petroleum Administrator's intent to declare the operation a high risk operation under this Section. The intent of this Section shall be to remediate the high-risk operation and bring the oil or gas facility and the operator within normal, safe operating standards and protect the public safety, health and environment. The written notice of the intent to declare the operation a high-risk operation shall include:

1. Facts substantiating the declaration; and
2. An advisory regarding the right to appeal the declaration.

B. Along with the determination of the facility being a high risk operation, the Petroleum Administrator may take either or both of the following actions:

1. An investigation of the causes leading up to the high risk designation;
2. Require a mandatory restoration plan submitted by the operator. Such plan shall include, but is not limited to:

- i. A mandatory restoration schedule for bringing the facility and operator within normal, safe operating standards. Such schedule does not supersede any timeline for abatement otherwise established for individual outstanding violations.
- ii. An audit of overall facility operation(s):
 - a. The audit shall be conducted by an independent third party approved by the Petroleum Administrator. Costs associated with the audit shall be borne by the operator;
 - b. The audit shall identify and analyze the root causes leading to the high risk designation;
 - c. The audit shall further identify and analyze other potential areas in overall facility operation that could impact the facility's ability to operate within safe and normal standards (e.g. personnel training, operational policies, internal procedures, etc.);
 - d. Provide a plan for remediating all issues identified in the audit, including a mandatory schedule for remediating those issues. Such restoration plans shall be subject to approval by the Petroleum Administrator.
 - e. The audit may be ordered in lieu of, or in addition to the investigations undertaken by the Petroleum Administrator.
- iii. Any other requirements the Petroleum Administrator deems necessary to bring the facility and operation within normal, safe operating standards for the purposes of protecting the public safety, health and environment.

C. The owner or operator of the high risk operation shall carry out the approved restoration plan and shall be responsible for paying all reasonable costs associated with the implementation of the plan, including:

1. City staff time in enforcing these provisions at an hourly rate that provides for full cost recovery of the direct and indirect costs. Staff time shall include, but is not limited to, the ongoing monitoring and verification of compliance with the approved restoration plan;

2. Investigative, research (including legal research) and consulting costs associated with preparation of the restoration plan;
3. Third party costs for investigation, consultation, engineering, clean-up, operator staff training, operations and all other related costs necessary to carry out the restoration plan;
4. Any other costs necessary to remediate the high risk operation as ordered by the Petroleum Administrator.

D. At the sole discretion of the Petroleum Administrator, at any time during which a facility or operator is subject to this Section, the Petroleum Administrator may require a bond be posted to cover the cost of remediating the causative problems of the high risk operation.

E. The designation of high risk operations or high risk operator shall continue to apply until the goals and guidelines of the restoration plan established hereunder is achieved. The high risk operator shall notify the Petroleum Administrator when a milestone in the restoration plan has been satisfied. The Petroleum Administrator may conduct independent verification of the compliance upon such notification. The restoration plan may be amended from time to time as necessary to achieve the purposes of this Section.

F. Failure of the owner of operator of a high risk operation to post a bond required under this Section, prepare the restoration plan within a reasonable timeframe as ordered by the Petroleum Administrator, or to reasonably achieve the goals and guidelines of an approved restoration plan under this Section, may be cause for a shutdown of the high risk operation(s) or any other petroleum operations located in the City that are co-owned or co-operated by the high risk operator, at the discretion of the Petroleum Administrator.

G. The owner or operator of a high risk operation shall compensate the City for any costs associated with the enforcement of this Section within 30 days of written demand by the Petroleum Administrator. Any City costs associated with enforcement of this Section, which are not promptly paid by the owner or operator shall be subject to enforcement by tax bill lien or other collection methods at the discretion of the City.

H. The City may institute legal proceedings to require compliance provisions with this Section.

9511 Operational Noticing

A. Each operator must submit copies of all notices provided to or received from DOGGR, in writing, to the Petroleum Administrator, within ten business days of transmission or receipt of such notices, as applicable.

B. The operator of (or any person who acquires) any well, property, or equipment appurtenant thereto, whether by purchase, transfer, assignment, conveyance, exchange or otherwise, shall each notify the Petroleum Administrator within ten business days of the transaction closing date. The notice shall contain the following:

1. The names and addresses of the person from whom and to whom the well(s) and property changed.
2. The name and location of the well(s) and property.
3. The date of acquisition.
4. The date possession changed.
5. A description of the properties and equipment transferred.
6. The new operator's agent or person designated for service of notice and his address.

C. The operator of any well shall notify the Petroleum Administrator, in writing, of the suspension of any drilling operations greater than five days. The operator shall notify the Petroleum Administrator in writing upon the resumption of operations giving the date thereof.

D. The operator shall report any violations of state or federal laws that occur on an oil and gas facility site to the Petroleum Administrator within 30 days of their date of documentation by a state or federal agency.

9512 Compliance with City Codes and Ordinances

All complaints related to activities regulated by this ordinance received by the operator shall be reported within one business day to the Petroleum Administrator. If the complaint is received after normal business hours, it shall be reported to the Petroleum Administrator at the opening of the next business day. In addition, the operator shall maintain a written log of all complaints and provide that log to the Petroleum Administrator on a quarterly basis. Depending upon the nature of the complaint and determination from the Petroleum Administrator, the operator shall report the complaint to the SCAQMD, DOGGR, and any other appropriate agencies with oversight authority

regarding the complaint at issue.

9513 Injunctive Relief

In addition to any administrative remedies or enforcement provided in this Code, the City may seek and obtain temporary, preliminary, and permanent injunctive relief to prohibit violation or mandate compliance with this ordinance. All remedies and enforcement procedures set forth herein shall be in addition to any other legal or equitable remedies provided by law.

9514 Notice of Violation and Administrative Fines

A. The operator shall also be subject to a penalty for violation of any requirement of a CUP or this ordinance as determined by the Petroleum Administrator, subject to the following:

1. Depending on the specific type and degree of the violation, the operator in violation may be penalized at a rate of \$5,000 to \$10,000 per day, per violation, until it is cured, but in no event, in an amount beyond that authorized by state law. The Petroleum Administrator will develop a violation fee schedule for Council for approval to specifically identify the fees associated with oil or gas facility violations. This violation fee schedule may also include nuisance violations.
2. In the event of a violation of any of the City's permitting actions, a written notice of violation and the associated penalty determination will be sent to the operator by the Petroleum Administrator. The operator shall deposit the sum of \$100,000 in an interest-bearing trust fund with the City within thirty days of the date of the second violation notice sent to the operator by the Petroleum Administrator, to establish a draw down account. If the noted violation is not corrected within thirty calendar days to the satisfaction of the Petroleum Administrator, or if steps satisfactory to the Petroleum Administrator have not been initiated during that period to affect a cure or to seek modification of the condition, the penalty amount cited in the written notice will be deducted from the account.

B. Nothing in this Section or ordinance shall limit the City's ability to pursue other enforcement procedures, including CUP revocation proceedings, actions to enforce a DA, or other legal or equitable remedies provided by this Code or available under the law.

9515 Nuisance Procedures

Any violation of this ordinance is hereby declared to be a public nuisance for the purposes of Section 5702, and may be abated pursuant to the procedures set forth in Article V, Chapter 7

(Property Maintenance) of this Code. The procedures for abatement shall not be exclusive, and shall not in any manner limit or restrict the City from otherwise enforcing this ordinance or abating public nuisances in any other manner as provided by law, including the institution of legal action by the City Attorney to abate the public nuisance at the request of the Director in charge of enforcing Chapter 7 of this Code.

9516 Compliance Monitoring

A. Environmental Compliance Coordinator(s). The City may hire Environmental Compliance Coordinators as needed to oversee the monitoring and condition compliance requirements of the City's permitting actions subject to regulation under this ordinance, the costs of which shall be reimbursed by operator. The number of Environmental Compliance Coordinators shall be determined by the City and shall take into account the level of petroleum operations associated with the project site. The Environmental Compliance Coordinator(s) shall be approved by, and shall report to, the Petroleum Administrator consistent with the City Manager's authority under Section 2107 of this Code. The responsibilities of the Environmental Compliance Coordinator(s) shall be determined by the City for the project site and shall generally include:

1. On-site, day-to-day monitoring of construction, drilling and redrilling, operational or abandonment and site restoration activities as determined by the Petroleum Administrator.
2. Taking steps to ensure that the operator, and all employees, contractors and other persons working in the project site, have knowledge of, and are in compliance with all applicable provisions of the conditional use permit or development agreement.
3. Evaluating the adequacy of drilling, redrilling, and construction and redevelopment impact mitigations, and proposing improvements to the operator or contractors, and the City.
4. Reporting responsibilities to the various City departments with oversight responsibility at the project site, as well as other agencies such as DOGGR, and SCAQMD.

B. Compliance Deposit Account. An applicant must establish a compliance deposit account with the City within 30 days of receiving authorization for a CUP or DA from the City. The compliance security deposit amounts shall be determined by the Petroleum Administrator, and shall be based on the nature and extent of the compliance actions required.

9517 Financial Assurances Applicability

A. Sections 9518 through 9520 shall apply to any person who owns, operates or guarantees performance for or who seeks to own, operate or guarantee performance for any oil or gas facility involved in exploration, production, processing, storage or transportation of oil or gas extracted from reserves in the City of Carson:

B. This ordinance shall not apply to the change of owner, operator or guarantor of the following:

1. Sales gas pipelines operated by a public utility and regulated by the California Public Utilities Commission;
2. A change of ownership consisting solely of a change in percentage ownership of a facility and which does not entail addition or removal of an owner or affect any financial guarantee for a permit.

9518 Operator's Financial Responsibilities

The applicant shall be fully responsible for all reasonable costs and expenses incurred by the City or any City contractors, consultants, or employees, in reviewing, approving, implementing, monitoring, or enforcing this ordinance or any CUP, DA, or permit, including but not limited to, costs for permitting, permit conditions implementation, mitigation monitoring (including well abandonment and re-abandonment), reviewing and verifying information contained in reports, undertaking studies, research and inspections, administrative support, and including the fully burdened cost of time spent by City employees, City Attorney, or third-party consultants on such matters.

9519 Securities and Bond Requirements

A. The Operator shall file a faithful performance bond with the Petroleum Administrator consistent with the following bonding requirements:

1. The Petroleum Administrator shall determine the amount of the bond based on the total number of wells, proposed operations, size and nature of the property, appropriate environmental studies on the property, including a Phase I, II or Human Health Risk Assessment Reports and other relevant conditions related to the proposed wells or operations at a specific oil or gas facility.
2. The amount of the bond shall be sufficient to assure the completion of the abandonment, necessary re-abandonment, site restoration, and remediation of

contamination of the oil or gas facility if the work had to be performed by the City in the event of forfeiture. The performance bond shall be inflation indexed to ensure the amount of the bond shall be sufficient to assure completion of the abandonment, restoration and remediation of contamination of the oil or gas facility.

3. Prior to expansion of an oil or gas facility, the operator shall apply to the Petroleum Administrator for a determination of the amount of the bond necessary to ensure completion for both the existing and expanded operations. In addition, every bond shall be re-assessed by the Petroleum Administrator every 5 years to ensure the amount is sufficient to ensure the completion of the abandonment, site restoration, and remediation of contamination of the oil or gas facility.
4. Upon application by the owner or operator, the petroleum operator may reduce bonding amounts based upon change of physical circumstances, completion or partial completion of work, or significant reduction in cost to perform the work. In no event shall the amount of the bond be reduced to an amount insufficient to complete any remaining work, nor shall the bond be reduced due to economic hardship or similar considerations.
5. After completion of all abandonment and site restoration requirements, the bond shall be maintained in a sufficient amount to ensure remediation of contamination at the oil or gas facility site for a period not less than 10 years.
6. In no event shall the bonding amount be less than \$50,000 per well

B. In lieu of these bonding requirements, an operator may also submit any other legally adequate and binding financial mechanism, subject to City Attorney approval, to satisfy the monetary assurance requirements set by the Petroleum administrator to assure completion of the abandonment, restoration and remediation of contamination of the oil or gas facility.

C. For any evaluation of bonding amounts by the Petroleum Administrator in this Section, or evaluation of a financial mechanism proposed in lieu of a bond by the City Attorney, the operator shall deposit the estimated costs with the Petroleum Administrator with the application, and shall also make any additional deposit(s) within 30 days of written request by the Petroleum Administrator. The Petroleum Administrator may retain consultants or other experts in the industry to assist in deriving a bond amount.

9520 Operator Liability Insurance

The operator or any contractor of any petroleum operation subject to this ordinance shall provide,

or cause to be provided, the insurance described below for each well, and shall maintain such insurance until the well is abandoned and the site restored. The operator or contractor must provide to the City sufficient documentation that the insurance complies with the minimum requirements and coverage amounts of this Section before a permit may be issued.

A. General provisions regarding insurance:

1. The operator or any contractor shall pay for and maintain in full force and effect all policies of insurance described in this Section with an insurance company(ies) either (i) admitted by the California Insurance Commissioner to do business in the State of California and rated not less than "A-VII" in Best's Insurance Rating Guide, or (ii) authorized the Petroleum Administrator.
2. In the event any policy is due to expire, the operator or any contractor shall provide a new certificate evidencing renewal of such policy not less than 30 calendar days prior to the expiration date of the expiring policy. Upon issuance by the insurer, broker, or agent of a notice of cancellation in coverage, operator or any contractor shall file with the Petroleum Administrator a new certificate and all applicable endorsements for such policy.
3. Liability policies shall name as "additional insured" the City, including its officers, officials, agents, employees and authorized volunteers.
4. All policies shall be endorsed to provide an unrestricted 30 calendar day written notice in favor of City of policy cancellation of coverage, except for the Workers' Compensation policy which shall provide a 10 calendar day written notice of such cancellation of coverage.
5. The operator shall present to the Petroleum Administrator copies of the pertinent portion of the insurance policies evidencing all coverage and endorsements required by this Section before the issuance of any permit subject to this ordinance, and the acceptance by the City of a policy without the required limits or coverage shall not be deemed a waiver of these requirements. The City may, in its sole discretion, accept a certificate of insurance in lieu of a copy of the pertinent portion of the policy pending receipt of such document by the City. After the issuance of the permit, the City may require the operator to provide a copy of the most current insurance coverage and endorsements for review at any time. The operator will be responsible for paying an administration fee to cover the costs of such review as may be established by the City's fee schedule.

6. Claims-made policies shall not be accepted except for excess policies and environmental impairment (or seepage and pollution) policies.
 7. Insurance coverage amounts set forth shall be reviewed by the Petroleum Administrator as required by Section 9509 to ensure adequate insurance is maintained.
- B. Required insurance coverage:
1. Commercial or comprehensive general liability insurance:
 - i. Bodily injury and property damage coverage shall be a minimum combined single limit of \$10,000,000 per occurrence with an annual general aggregate coverage of \$25,000,000. This coverage must include premises, operations, blowout or explosion, products, completed operations, blanket contractual liability, underground property damage, underground reservoir (or resources) damage, broad form property damage, independent contractor's protective liability and personal injury.
 - ii. Underground reservoir (or resources) damage coverage shall be on an occurrence basis, shall not be limited to sudden and accidental occurrences, shall not have a discovery or reporting limitation and shall not exclude damage to water tables, formation or strata.
 - iii. Environmental impairment (or seepage and pollution) coverage shall be either included in the comprehensive general liability coverage or as separate coverage. Such coverage shall not exclude damage to the lease site. If environmental impairment (or seepage and pollution) coverage is written on a "claims made" basis, the policy must provide that any retroactive date applicable precedes the effective date of the issuance of the permit. Coverage shall apply to sudden and accidental pollution conditions resulting from the escape or release of smoke, vapors, fumes, acids, alkalis, toxic chemicals, liquids, oil and gas, waste material, or other irritants, contaminants or pollutants. Such policy shall provide for minimum combined single limit coverage of \$25,000,000.00 per occurrence. A discovery period for such peril shall not be less than ten years after the occurrence.
 2. Commercial automobile liability insurance: Minimum combined single limit of \$10,000,000.00 per occurrence for bodily injury and property damage. The policy shall be at least as broad as the most current version of Insurance Services Office

(ISO) Business Auto Coverage Form CA 00 01 and shall include coverage for all owned, hired, and non-owned automobiles or other licensed vehicles (Section 1, subsection A.1 entitled "Any Auto")

3. Worker's compensation insurance: In addition to the minimum statutory requirements, coverage shall include employer's liability limits of at least \$1,000,000.00 for each accident, \$1,000,000.00 for each employee, and \$1,000,000.00 for occupational disease, and the insurer shall agree to waive rights of subrogation against the City, its officers, officials, agents, employees and authorized volunteers, for any work performed for the City by the operator.
4. Excess (or umbrella) liability insurance: Minimum limit of \$25,000,000.00 providing excess coverage for each of the perils insured by the preceding liability insurance policies.
5. Control of well insurance:
 - i. Minimum limit of \$10,000,000.00 per occurrence, with a maximum deductible of \$250,000.00 per occurrence.
 - ii. Policy shall cover the cost of controlling a well that is out of control, re-drilling or restoration expenses, and seepage and pollution damage. Damage to property in the operator's care, custody and control with a sub-limit of \$500,000.00 may be added.

C. Failure to maintain coverage: Upon failure of the owner, operator, or contractors to provide that proof of insurance as required by this Section when requested, the Petroleum Administrator may order the suspension of any outstanding permits and petroleum operations of the operator until the operator provides proof of the required insurance coverage.

Part 2. Development Standards for Petroleum Operations

9521 Setback Requirements

Oil and gas facility sites and associated operations shall not be located within:

- A. Fifteen hundred feet (1,500 feet) of any public school, public park, hospital, long-term health care facility.

- B. Fifteen hundred feet (1,500 feet) of any residence or residential zone, as established in this Code, except the residence of the owner of the land on which a well might be located and except a residence located on the land which, at the time of the drilling of the well, is under lease to the person drilling the well.
- C. Five hundred feet (500 feet) of any commercially designated zone, as established by this Code.
- D. Fifty feet (50 feet) of any dedicated public street, highway, public walkway, or nearest rail of a railway being used as such, unless the new well is located on an existing drill site and the new well would not present a safety issue or cause conflicts with a right-of-way.
- E. For all new wells associated with oil and gas production, including injection wells, the Applicant shall provide an area of review (AOR) study, consistent with the requirements of 14 California Code of Regulations Section 1724.7, to identify any potential conduits that may allow migration of reservoir fluids outside of the intended zone of injection. The AOR study shall define setbacks from abandoned wells or include re-abandonment of abandoned wells to minimize conduits. Leak testing of all abandoned or re-abandoned wells within the AOR or as designated by the Petroleum Administrator, shall be performed consistent with the standards of Section 9534, and any leaking wells shall be re-abandoned consistent with this ordinance. The AOR shall be submitted prior to the Petroleum Administrator's approval of a drilling permit.

9522 Site Access and Operation

The following measures shall be implemented throughout the operation of any oil and gas facility or project subject to this ordinance:

9522.1 Deliveries

Deliveries to the oil or gas facilities shall not be permitted after 6:00 p.m. and before 8:00 a.m., except in cases of emergency. No deliveries shall be permitted on Saturdays, Sundays or legal holidays, except in cases of emergency.

9522.2 Construction Time Limits

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.

9522.3 Oil and Gas Facility Parking

The following measures shall be implemented throughout the operation of any oil and gas facility

or project subject to this ordinance:

- A. At all times after any drilling is started at any oil or gas facility, parking facilities shall be provided for use by vehicles used in the drilling and maintaining of wells at the oil or gas facility. If approved as part of a CUP or a DA, parking for automobiles of employees or workers engaged in drilling activities can also be provided by the operator at off-site parking lots or in parking facilities, other than public streets, at locations other than the oil or gas facility site. If the parking lot or parking facilities are not located within a reasonable walking distance of the controlled drill site, the operator shall provide transportation to and from the parking site for employees and workers.
- B. At all times vehicular access to a controlled drill site shall be provided in accordance with the plans for vehicular access reviewed by the City Engineer.
- C. All entrances to a controlled drill site shall be equipped with sliding gates which shall be kept closed at all times except when authorized vehicles are entering or leaving the drill site.
- D. When traffic lanes on any public street are closed or impaired by the operator's operations, flagmen, and safety officers as required by the L.A. County Sheriff's office shall be provided by the operator at all such times to and traffic and maintain traffic flow.

9523 Lighting

All point lighting sources that may be introduced onsite in support of nighttime operations, at the onset and throughout all operations at an oil and gas facility shall be screened and directed to prevent offsite spillover lighting effects. Outdoor lighting shall be restricted to only those lights that are required by Article VIII of this Code for lighting building exteriors and safety and security needs.

9524 Aesthetics

The following measures shall be implemented for all projects that are subject to this ordinance:

9524.1 Landscaping/Visual Resources

- A. Prior to commencement of operations at an oil or gas facility, the operator shall implement a landscaping plan prepared by a licensed landscape architect, that has been approved as part of a CUP or a DA, which provides adequate screening and blending of the facilities so that the site shall not appear unsightly or aesthetically deficient compared with the surrounding character of the area. All tanks shall be depressed so that the top of any tank and other equipment and appurtenances shall not extend more than twenty feet above the surface of any controlled drill site, unless otherwise approved in a CUP or DA.

B. Within six months after the completion of the drilling and the removal of the drilling rig, any drill site shall be landscaped with suitable shrubbery and trees in accordance with a plan approved by the Planning Commission, unless the site is to be otherwise developed in such a manner that would preempt re-vegetation requirements.

C. If any drilling masts are in place on an oil and gas facility for a time period of more than one year and are visible from public viewing points then the operator shall wrap all such masts to reduce their visibility prior to the onset of operations at an oil and gas facility.

9524.2 Walls

Prior to commencement of operations at an oil or gas facility the following development standards shall be satisfied:

A. All drilling facilities shall be enclosed with a wall not less than six feet (6 feet) high, which shall be of a material and texture that blends in with the surrounding environment and is not visually obtrusive. There shall be no aperture below the fence larger than one foot (1 foot) in height.

B. The wall enclosure around the pump and related facilities shall have an interior setback of twenty-five feet from all property lines. The gate or entrance through the wall shall remain locked at all times and constructed in a manner to prevent the public from coming closer than twenty-five feet to the pumping facilities. Pursuant to the approval of the Conditional Use Permit, the location of the wall may be modified subject to compliance with the California Fire Code as approved in a CUP or DA with modifications as applicable.

C. The entire outside facing length of the wall must be coated with anti-graffiti paint or solutions.

9524.3 Sanitation

The oil and gas facilities shall be maintained in a clean, sanitary condition, free from accumulations of garbage, refuse, and other wastes.

9524.4 Architecture

The architectural design of any oil or gas facility buildings, equipment, drilling mechanisms or other associated structures shall be consistent with the character of the surrounding community and shall utilize finishing materials and colors which blend in with the surrounding environment and are not visually obtrusive.

9525 Roads

The following policies specific to streets or other roads shall apply to all projects for which this ordinance is applicable:

9525.1 Construction of Site Access Roads

Private roads and other excavations required for the construction of access roads 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 Petroleum Administrator and the Department of Public Works 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 length of said access road from the public street or highway.

9525.2 Maintenance and Restoration of Public Roads

Throughout operation of an oil or gas facility the operator shall be responsible for the paying for the maintenance of public roads, which are used intensively for any materials transport, construction, or site access related to drilling, re-drilling and related operations. Prior to initiating any construction or operations the operator shall be responsible for conducting a road condition assessment including recording, through video, pictures and/or written documentation the existing public road conditions that will be used for any portion of the proposed project. The road condition assessment must be submitted to the Petroleum Administrator and be accepted by the City Engineer prior to commencement of operations. Upon demand from the City Engineer, the operator shall then pay the City the compensation necessary to maintain, restore or repair any damage related to the operations in order to return the road to its pre-project 'baseline' condition.

9526 Signage

- A. Each well shall be marked with a sign, which lists the name of the company owning the well, the well number, and a telephone number for twenty-four hour emergency notification. The sign shall not exceed six square feet in area and shall be located so that it is clearly visible from the street where the access drive is located.
- B. The sign shall be kept in good legible condition at all times.

C. No sign other than that described in this ordinance shall be allowed, other than informational signs, no smoking signs, and other signs as reasonably required for safe operation of the project.

D. Signs shall not be constructed, erected, maintained or placed on the premises or any part thereof, except those required by law or ordinance to be displayed in connection with the drilling or maintenance of the well.

E. Identification signs, at intervals acceptable to the Petroleum Administrator, shall be posted and maintained in good condition along the outer boundary line fence and along the fences adjoining the public roads that pass through the oil or gas facility. 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 assess any potential problem and recommend a corrective course of action. Each sign shall also have the telephone number of the City department of planning or zoning enforcement section and the number of SCAQMD that can be called if odors are detected.

9527 Steaming

All wells used for steaming shall be specifically designed for steaming purposes. If an operator seeks to use steaming methods then, prior to the use of any steaming operations on the oil or gas facility, the operator shall submit a steaming plan to the Petroleum Administrator for review and approval. The steaming plan shall include casing and cementing design specifications and requirements.

9528 Utilities

A. Each oil or gas facility shall be served by and utilize only reclaimed water, aside from potable water used for human consumption, unless the use of reclaimed water is deemed infeasible by the Petroleum Administrator, in which case the following criteria apply:

1. The operator must prepare an individual study of all water resources available for use and submit the study for review of the Petroleum Administrator.
2. If the study indicates that potable water is the only feasible alternative then the operator may utilize such a water source only if the operator provides an equal and measurable benefit to the community for such use, as determined by the Petroleum Administrator.

- B. New electrical power shall be routed underground from the nearest source adequate to meet the needs of the well site.

9529 On-Site Storage and Placement of Equipment

No equipment shall be stored on the site, which is not essential to the everyday operation of the oil or gas well located thereon.

9530 Safety Assurances and Emergency/Hazard Management

The following measures shall be implemented throughout the operation of any oil or gas facility or project subject to this ordinance:

9530.1 Fire Prevention Safeguards

- A. All drilling and producing operations shall conform to all applicable fire and safety regulations.
- B. The entire property on which the oil or gas well is located shall be kept free of debris, pools of oil, water or other liquids, weeds, and trash.
- C. Land within twenty-five feet of the well shall be kept free of dry weeds, grass, rubbish or other combustible material at all times.
- D. All equipment and design must be approved by the Los Angeles County Fire Department prior to approval of a Conditional Use Permit or development agreement.

9530.2 Blowout Standards and Testing

The operator shall comply with DOGGR regulations for blowout prevention and will provide all equipment as stipulated in the DOGGR regulations during the drilling operations of any well.

9530.3 Earthquake Shutdown

- A. The operator shall cease any non-essential drilling and production activities and inspect all project-related facilities, equipment, and pipelines following any seismic event that generates a ground acceleration of 15 percent of gravity or more.
- B. The operator shall either, (1) Operate and maintain an accelerometer at the project site or (2) Obtain real time data from a nearby accelerometer, to determine site-specific ground accelerations as a result of any seismic event in the region (Los Angeles County). The operator shall inspect all project site pipelines, storage tanks, and other infrastructure following any

seismic event that exceeds a ground acceleration at the project site of 15 percent of gravity (0.15 g) and promptly notify the City Engineer and the Petroleum Administrator. Shall there be any structural damage or equipment failure as a result of any seismic event, the operator shall isolate and address any damage or equipment failure as appropriate to minimize environmental or safety impacts. The operator shall prepare a written report of all inspections and findings to the City for review and approval prior to the recommencement of any operations.

C. The operator shall not reinstitute operations at those portions of the project site and associated pipelines until it can reasonably be determined by the Petroleum Administrator that all project site infrastructure is repaired and structurally sound.

9530.4 Storage Tank Monitoring

The operator shall install an interstitial monitoring leak detection system that will indicate the physical presence of a leaked product underneath storage tanks on site that have the potential to result in soil contamination. The results of the monitoring will be made available to the Petroleum Administrator upon request. The monitoring system will abide by the following specifications:

1. The barrier must be immediately around or beneath the tank,
2. The interstitial monitor must be checked at least once every 30 days
3. The system must be able to detect a release through the tank floor.

9530.5 Safety Measures and Emergency Response Plan

The operator is responsible for satisfying the following safety and emergency response requirements:

A. **Emergency Response Drills.** The operator shall demonstrate the effectiveness of the emergency response plan by responding to one planned emergency response drill per year, which shall be conducted in conjunction with the Los Angeles County Fire Department. Emergency response drills required by other agencies that involve the Los Angeles County Fire Department can be used to satisfy this provision. In addition, the operator shall demonstrate the effectiveness of the emergency response plan by responding to not more than two unannounced drills each year, which may be called at the discretion of the Los Angeles County Fire Department or Petroleum Administrator at the oil field. If critical operations are then underway at the oil field, the operator need not respond to a 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.

B. **Safety Audit.** The operator shall cause to be prepared an independent third-party audit, under the direction and supervision of the City, of all facilities, once constructed, including the well pads, to ensure compliance with the California Fire Code (as may be adopted by the City with modifications as applicable), applicable API and NFPA codes, EPA RMP, OSHA PSM, DOGGR and SPCC and emergency response plans requirements. All audit items shall be implemented in a timely fashion, and the audit shall be updated annually, as directed by the City and the Los Angeles County Fire Department. The final installation of the facilities shall include a seismic assessment, including walkthroughs, of equipment to withstand earthquakes prepared by a registered structural engineer in compliance with Local Emergency Planning Committee Region 1 CalARP guidance and the seismic assessment shall be updated, with walkthrough inspections, annually to ensure compliance with the codes and standards at the time of installation.

C. **Community Alert System.** The operator shall implement a community alert notification system, or utilize an existing system operated by the Police, Sheriff or Fire Department, to automatically notify area residences and businesses in the event of an emergency at oil or gas facilities that would require residents to take shelter or take other protective actions.

D. **Fire Safety Measures.** The operator will implement the following fire safety measures:

1. The operator shall ensure that design and construction comply with applicable codes and standards for equipment spacing, particularly those related to flare location and distances to public areas, installation of fire detection and prevention systems, flame detection, flammable gas detection, fire foam, and associated alarms and alert systems. The design and construction compliance status shall be verified by third-party audits overseen by the City.
2. The operator shall develop emergency response plans addressing the facility's fire-fighting capabilities pursuant to the most recent NFPA requirements, the California Fire Code (as may be adopted by the City with modifications as applicable), Los Angeles County Fire Department, California Code of Regulations, and API requirements, in coordination with Los Angeles County Fire Department and the City of Carson. These plans shall include, but not be limited to, fire monitor placement, fire water capabilities, fire detection capabilities, fire foam requirements, facility condition relating to fire-fighting ease and prevention, and measures to reduce impacts to sensitive resources. The plan shall also address coordination with local emergency responders and area schools and daycare facilities.

3. Emergency response plans shall address the issues related to wildfire risks and response, including development of fuel management/modification fire hazard management plan according to Fire Department requirements, coordination with the area residences and potentially affected agencies, , as well as identification of first response tactics and equipment available to address wildfire risks.

9530.6 Transportation of Chemicals and Waste On and Off-site

The following measures shall be implemented throughout the operation of any oil and gas facility or project subject to this ordinance:

- A. **Solid Waste Disposal.** Solid waste generated on the site shall be transported to a City-approved landfill or hazardous waste facility as may be appropriate for the life of the operation.
- B. **Drilling Site Waste Removal.** The operator shall comply with the following provisions:
 1. All drilling, redrilling and workover waste shall be collected in portable steel bins compliant with United States Department of Transportation standards. Any drilling, redrilling, and workover wastes that are not intended to be injected into a Class II Well, as permitted by DOGGR, shall be removed from the project site no later than thirty days following completion of the drilling, redrilling and workover.
 2. No project site waste shall be discharged into any sewer unless permitted by the Sanitation District, or into any storm drain, irrigation system, stream, or creek, street, highway, or drainage canal. Nor shall any such wastes be discharged on the ground.
 3. The operator shall comply with all provisions of a recycling plan that has been approved by the Petroleum Administrator. The recycling plan shall include any elements requested by the Petroleum Administrator.
- C. **Storage of Hazardous Materials.** The operator shall give the Petroleum Administrator a copy of the Hazardous Material Business Plan, as approved by the Los Angeles County Fire Department, annually. This plan shall provide the location of where hazardous materials are stored at the pad site. Hazardous materials shall be stored in an organized and orderly manner, and identified as may be necessary to aid in preventing accidents, and shall be reasonably protected from sources of external corrosion or damage to the satisfaction of the Fire Chief of the Los Angeles County Fire Department or designee.

9530.6.1 Natural Gas Liquids (NGLs)

Throughout the operation of any oil and gas facility or project subject to this ordinance heavier

NGLs and butanes shall be blended with crude oil for shipment by pipeline to the maximum extent allowable within the technical specifications of the pipeline, however, blending of butanes shall not take priority over blending of heavier NGLs when technical limitations are reached. Oil transportation pipelines and gas processing facilities shall be designed to maximize the blending of NGLs into the crude oil stream.

9530.6.2 Transportation Risk Management and Prevention Program (TRMPP)

If any product from oil and gas development in the City is to be transported by truck, the operator shall prepare and maintain a Transportation Risk Management and Prevention Program that meets City approval. The TRMPP may contain the following components including, but not limited to:

- A. Provisions for conducting comprehensive audits of carriers biennially to assure satisfactory safety records, driver hiring practices, driver training programs, programs to control drug and alcohol abuse, safety incentive programs, satisfactory vehicle inspection and maintenance procedures, and emergency notification capabilities. The operator shall submit to the City an annual summary of any audits that were conducted each calendar year.
- B. Provisions for allowing only carriers which receive a satisfactory rating under the above audit process to transport oil and gas products.
- C. Truck loading procedures 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 procedures to specify action to be taken when problems are found during the visual inspection.

9530.6.3 Pipeline Leak Detection

All new oil transportation pipelines shall use a supervisory control and data acquisition (SCADA-type) monitoring system for leak detection; unless the Petroleum Administrator determines that there is better available technology that shall be utilized instead. The flow meter used on the SCADA system shall be accurate to within one percent. If a leak is detected the operator shall be responsible for immediately reporting it to the Petroleum Administrator.

9531 Environmental Resource Management

Throughout operation of an oil or gas facility the operator shall comply with the following environmental resource management policies:

9531.1 General Environmental Program

A. Environmental Quality Assurance Program ("EQAP"). The operator shall comply with all provisions of an environmental quality assurance program that has been accepted by the Petroleum Administrator and approved as part of a CUP or DA. The following provisions relate to the EQAP:

1. EQAP Requirements. The EQAP shall provide a detailed description of the steps the operator shall take to assure compliance with all provisions of this Section, including but not limited to, all of the monitoring programs called for by this Section.
2. Annual EQAP Reports. Within sixty days following the end of each calendar year, the operator shall submit to the Petroleum Administrator an annual EQAP report that reviews the operator's compliance with the provisions of the EQAP over the previous year and addresses such other matters as may be requested by the Petroleum Administrator. The annual EQAP report shall include the following:
 - i. A complete list and description of any and all instances where the provisions of the EQAP, or any of the monitoring programs referred to therein or in this Section, were not fully and timely complied with, and an analysis how compliance with such provisions can be improved over the coming year.
 - ii. Results and analyses of all data collection efforts conducted by the operator over the previous year pursuant to the provisions of this Section.
3. EQAP Updates. Proposed updates to the EQAP shall be submitted to the Petroleum Administrator for approval along with the annual EQAP report. The Petroleum Administrator shall complete the review of EQAP updates as soon as practicable, and shall either approve the updated EQAP or provide the operator with a list of specific items that must be included in the EQAP prior to approval. The operator shall respond to any request for additional information within thirty days of receiving such request from the Petroleum Administrator and shall modify the proposed EQAP update consistent with the Petroleum Administrator's request.

B. Publicly Available Monitoring Data. The operator shall be responsible for providing current monitoring results and data directly to the public. The up-to-date monitoring data and results will be located on a website run by the operator, company, or entity responsible for the oil or gas facility. The monitoring results and data shall include the following information:

1. Air quality data

2. Wind direction data
3. Seismic events
4. Water quality monitoring results for both surface and groundwater monitoring locations at an oil or gas facility
5. Pipeline testing and monitoring results
6. Vibration
7. Ambient noise levels

9531.2 Air Quality

The operator shall at all times conduct oil or gas facility operations to prevent the unauthorized release, escape, or emission of dangerous, hazardous, harmful and/or noxious gases, vapors, odors, or substances, and shall comply with the following provisions:

A. Odor Minimization. At all times the operator shall comply with the provisions of an odor minimization plan that has been approved by the Petroleum Administrator. The odor minimization plan shall include any measures requested by the Petroleum Administrator. The plan shall provide detailed information about the facility and shall address all issues relating to odors from oil or gas 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 odor minimization plan shall be reviewed by the operator on an annual basis to determine if modifications to the plan are required. Any modifications to the odor minimization plan shall be submitted to the Petroleum Administrator for review and approval.

B. Portable Flare for Drilling. The operator shall have a gas buster and a portable flare, approved by the SCAQMD, at the oil or gas 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 of the Los Angeles County Fire Department and the SCAQMD within forty-eight hours in the event a measurable amount of gas is burned by the flare, and shall specify the volume of gas that was burned in the flare. All other drilling and re-drilling operations shall be conducted so that any measurable gas that is encountered can, and will, be retained in the wellbore 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 of the Los Angeles County Fire Department and the SCAQMD in the event any gas from drilling or re-drilling operations is released into the atmosphere without being directed to and burned in the flare. The requirements of this subsection D are applicable to all oil and gas wells except for such facilities where the operator has adequately demonstrated that the wells are compliant with the following: (1) the well adheres to a setback a minimum distance of 1,000 feet from any sensitive receptors, (2) the drilling operations are not expected to enter reservoirs known to produce any hydrogen sulfide, and (3) there is no evidence of pressure in the resource reservoir that is the subject of the resource extraction operations of the drilling activity.

C. Odor Suppressant for Drilling and Redrilling Operations. The operator shall use an enclosed mud system that directs all mud vapors through an odor capturing system, such as a carbon bed, to prevent odiferous pollutants from impacting the area. An odor suppressant spray system shall be used on the mud shaker tables for all drilling and re-drilling operations to ensure that no odors from said operations can be detected at the outer boundary line of the project site.

D. Closed Systems. The operator shall ensure all produced water, gas and oil associated with production, processing, and storage, except those used for sampling only, are contained within closed systems at all times and that all pressure relief, including tanks, vent to a closed header and flare-type system to prevent emissions of odiferous pollutants.

E. Meteorological Station. The operator shall maintain and operate a meteorological station at the oil field in good operating condition and in compliance with all applicable Environmental Protection Agency ("EPA") and SCAQMD rules, regulations, and guidelines, and to the satisfaction of the Petroleum Administrator. The operator shall conduct an audit of the meteorological station on an annual basis and submit the results of the audit to the SCAQMD and the Petroleum Administrator. The operator shall maintain the data files for the meteorological station for a period of not less than ten years. All such data shall be available upon request to the SCAQMD and the Petroleum Administrator.

F. Health Risk Assessment. After every five years of operation of the meteorological station, the operator shall provide the previous five years of meteorological data to the SCAQMD and the Petroleum Administrator and a health risk assessment shall be performed to indicate that health risks comply with SCAQMD standards.

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

1. Utilize California Air Resources Board ("CARB") EPA Certification Tier III or other methods approved by the CARB as meeting or exceeding the Tier III standard.
 2. Utilize a CARB Level 3 diesel catalyst. The catalyst shall be capable of achieving an eighty-five percent reduction for diesel particulate matter. Copies of the CARB verification shall be provided to the Petroleum Administrator. Said catalysts shall be properly maintained and operational at all times when the off-road diesel construction equipment is in use.
- H. Drill Rig Engines. All drilling, redrilling, and workover rig diesel engines shall comply with the following provisions:
1. Utilize CARB/EPA Certification Tier III or better certified engines
 2. Utilize a CARB 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 Petroleum Administrator. Said catalysts shall be properly maintained and operational at all times when the off-road diesel construction equipment is in use.
- I. Fugitive Dust Control Plan. The operator shall comply with the provisions of a fugitive dust control plan that has been approved by the Petroleum Administrator. The plan shall be based upon the requirements of SCAQMD Rule 403 and the SCAQMD CEQA Guideline Fugitive Dust Control Measures as may be updated. The fugitive dust control plan shall be reviewed by the operator every five years to determine if modifications to the plan are required. Any modifications to the fugitive dust control plan shall be submitted to the Petroleum Administrator for review and approval. The fugitive dust control plan shall include any measured requested by the Petroleum Administrator.

9531.3 Greenhouse Gas Emissions and Energy Efficiency Measures

- A. The operator of a project site shall completely offset all emissions from the oil and gas facility through participation in the statewide cap and trade program, if applicable, or obtaining credits from another program, such as the SCAQMD Regulation XXVII, as approved by the Petroleum Administrator. On an annual basis, the operator shall provide the Petroleum Administrator with documentation of the operator's participation in the program.
- B. Throughout the project life, as equipment is added or replaced; cost-effective energy conservation techniques shall be incorporated into project design.

9531.4 Air Quality Monitoring and Testing Plan

At all times the operator shall comply with the provisions of an air monitoring plan that has been approved by the Petroleum Administrator (as part of the EQAP). The air monitoring plan shall include any measure requested by the Petroleum Administrator. During drilling, redrilling, and workover operations, the operator shall monitor for hydrogen sulfide and total hydrocarbon vapors as specified in the approved plan. Total hydrocarbon vapors shall be monitored at the gas plant as specified in the approved plan. Such monitors shall provide automatic alarms that are triggered by the detection of hydrogen sulfide or total hydrocarbon vapors. For drilling, redrilling, or workover monitors, the alarms shall be audible and/or visible to the person operating the drilling, redrilling, or workover equipment. For the gas plant monitors, the alarms shall be audible or visible to the operator. Actions to be taken shall be as follows when specified alarm levels are reached:

- A. At a hydrogen sulfide concentration of equal to or greater than five parts per million but less than 10 parts per million, the operator shall immediately investigate the source of the hydrogen sulfide emissions and take prompt corrective action to eliminate the source. The corrective action taken shall be documented in the drilling, redrilling, or workover log. If the concentration is not reduced to less than five parts per million within four hours of the first occurrence of such concentration, the operator shall shut down the drilling, redrilling, or workover operations 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 promptly shut down the drilling, redrilling, or workover operations 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, redrilling, or workover log. When an alarm is received, the operator shall promptly notify the Los Angeles County Fire Department, the Petroleum Administrator, and the 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 prompt corrective action to eliminate the source. The corrective action taken shall be documented in the drilling log for drilling, redrilling, or workover and in the gas plant log for the gas plant. If the concentration is not reduced to less than 500 parts per million within four hours of the first occurrence of such concentration, the operator shall shut down the drilling, redrilling, workover, or gas plant operations 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 promptly shut down the drilling, re-drilling, or workover or gas plant operations 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 log for drilling, re-drilling, or workover and in the gas plant log for the gas plant. When an alarm is received, the operator shall promptly notify the Los Angeles County Fire Department - Health Hazardous Materials Division, and the SCAQMD.

E. All the monitoring equipment 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, on a quarterly basis, provide a summary of all monitoring events where the hydrogen sulfide concentration was at five parts per million or higher and the total hydrocarbon concentration was at 500 parts per million or higher to the Fire Chief of the Los Angeles County Fire Department. At the request of the Fire Chief, the operator shall make available the retained records from the monitoring equipment.

9531.5 Water Quality

The operator shall at all times conduct oil operations to avoid any adverse impacts to surface and groundwater quality, and shall comply with the following provisions:

9531.5.1 Water Quality Management Plan

The operator shall comply with all provisions of a water management plan that has been approved by the Petroleum Administrator. The plan shall include best management practices, water conservation measures, and the use of a drip irrigation system. The water management plan shall be reviewed by the operator every three years to determine if modifications to the plan are required. The operator shall make changes to the plan if requested by the Petroleum Administrator. Any modifications to the water management plan shall be submitted to the Petroleum Administrator for review and approval. The water management plan shall include any elements requested by the Petroleum Administrator.

9531.5.2 Stormwater Runoff

Construction Storm Water Pollution Prevention Plan ("SWPPP"). The operator shall maintain and implement all provisions of a storm water pollution prevention plan ("SWPPP") that has been inspected by the Regional Water Quality Control Board and the Petroleum Administrator. The operator shall provide the Petroleum Administrator with a copy of the SWPPP, and any future modifications, revisions, or alterations thereof, or replacements therefore. The SWPPP shall be updated prior to new construction activities as required by the Regional Water Quality Control

Board.

9531.5.3 Groundwater Quality

- A. Prior to any development on the subject site, the operator shall prepare a baseline study of all groundwater resources located within the project site or directly adjacent to the project site, to specifically include an analysis of the location and reservoir characteristics of all existing groundwater resources, a chemical analysis of the groundwater, and an overall assessment of the groundwater quality.
- B. The operator shall not inject any water spoils derived from the drilling operations into any non-exempt or DOGGR exempt freshwater basins.
- C. Within 30 days of request by the City, the operator shall deposit funds with the City necessary to retain a third party to prepare a hydrological analysis Groundwater Testing Program prior to any construction activities. Depending on the results of the hydrological analysis the Petroleum Administrator has the discretion to require the operator to install one or more groundwater monitoring wells, if sufficient groundwater wells are not available in the area, to allow for confirmation that groundwater is not being affected by project activities. As part of the Groundwater Testing Program the operator is required to provide the Petroleum Administrator with annual monitoring and testing results.
- D. The operator shall be responsible for obtaining a field study from DOGGR. If DOGGR does not provide this to the operator then the operator shall submit evidence detailing DOGGR's response to their field study request to the Petroleum Administrator for review.
- E. The operator shall perform casing testing to 100% of the anticipated reservoir pressures before any wells are put into production and every five years thereafter. Copies of testing results shall be submitted to the Petroleum Administrator.
- F. The operator shall perform cement testing, including radial cement evaluation logs or equivalent as approved by the Petroleum Administrator, before any wells are put into production and every five years thereafter. Copies of testing results shall be submitted to the Petroleum Administrator.

9531.6 Noise Impacts

All oil and gas operations at the oil or gas facility shall be conducted in a manner that minimizes noise and shall comply with the following provisions:

- A. Noise produced by oil or gas operations shall include no pure tones when measured at a distance of 1,000 feet from the project site.
- B. Backup alarms on all vehicles operating within the oil field shall be disabled between the hours of 6:00 p.m. and 8:00 a.m. During periods when the backup alarms are disabled, the operator shall employ alternative low-noise methods for ensuring worker safety during vehicle backup, such as the use of spotters.
- C. All drilling and redrilling on the oil field between the hours of 6:00 p.m. and 8:00 a.m. shall be conducted in conformity with a quiet mode operation plan that has been approved by the Petroleum Administrator. The quiet mode operation plan shall be reviewed by the operator every year to determine if modifications to the plan are required. The operator shall make changes to the plan if requested by the Petroleum Administrator. Any modifications to the quiet mode drilling plan shall be submitted to the Petroleum Administrator for review and approval. The quiet mode operation plan shall include any other additional measures requested by the Petroleum Administrator.
- D. All noise producing oil field equipment shall be regularly serviced and repaired to minimize increases in pure tones and other noise output over time. The operator shall maintain an equipment service log for all noise-producing equipment.
- E. All construction equipment shall be selected for low-noise output. All construction equipment powered by internal combustion engines shall be properly muffled and maintained.
- F. Unnecessary idling of construction equipment internal combustion engines is prohibited.
- G. The operator shall instruct employees and subcontractors about the noise provisions of this ordinance prior to commencement of each and every drilling, redrilling, workover, and construction operation, and shall annually certify to the Petroleum Administrator 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 oil and gas facility site.
- H. All oil operations on the project site shall be conducted in a manner that minimizes vibration. Additionally, vibration levels from oil or gas operations at the project site, as measured from the perimeter of the oil or gas facility, shall not exceed a velocity of 0.25 mm/s over the frequency range 1 to 100 Hz.
- I. Within 30 days of request by the Petroleum Administrator, the operator shall deposit funds for the Petroleum Administrator to retain an independent qualified acoustical engineer to monitor (1) ambient noise levels and (2) vibration levels in the areas surrounding the oil or gas

field as determined necessary by the Petroleum Administrator. The monitoring shall be conducted unannounced and within a time frame specified by Petroleum Administrator. Shall noise or vibrations from the oil or gas operations exceed the noise thresholds specified in Sections 5500, 5501, 5502, and 5503, of the Code or the vibration thresholds specified in Subsection (H) of this Section of the Code, operation can be subject to enforcement under this ordinance including notices of violation per Section 9514. No new drilling or redrilling permits shall be issued by the City until the operator in consultation with the Petroleum Administrator identifies the source of the noise or vibration and the operator takes the steps necessary to assure compliance with thresholds specified in this ordinance. The results of all such monitoring shall be promptly posted on the website for the oil or gas facility and provided to the Petroleum Administrator.

9532 Standards for Wells

The operator shall comply with all of the following provisions:

- A. All DOGGR regulations related to drilling, redrilling, and workover operations.
- B. No more than one drilling or redrilling rigs shall be present within the oil or gas site at any one time.
- C. Before the end of each calendar year, the operator shall develop and deliver to the Petroleum Administrator an annual drilling, redrilling, workover, well abandonment, and well pad restoration plan, which shall describe all drilling, workover, well abandonment, and well pad restoration activities that is proposed during the upcoming calendar year, in compliance with the following requirements:
 1. The operator may at any time submit to the Petroleum Administrator proposed amendments to the then current annual plan.
 2. No drilling, redrilling, or abandonment activity may be commenced unless it is described in a current annual plan (or an amendment thereto), which has been approved by the Petroleum Administrator.
 3. The annual plan (and any amendments) shall be provided to the Petroleum Administrator for review, comment, and approval. All comments on the annual plan shall be submitted to the Petroleum Administrator in writing, and, if timely submitted, will be considered as part of the Petroleum Administrator's review and approval. No annual plan or amendments shall be complete until the operator submits a deposit to the Petroleum Administrator for the estimated costs of review. The operator shall make additional deposit(s) within 15 days of request by the Petroleum Administrator if

the initial deposit is insufficient to cover the City's actual costs and expenses for review.

4. The Petroleum Administrator shall complete the review of the annual plan (and any amendments) within forty-five days of receipt, unless the operator has failed to provide a sufficient deposit for review, and shall either approve the annual plan or provide the operator with a list of deficiencies. Failure to provide a deposit within 15 days request by the Petroleum Administrator may be grounds for rejection of the plan.

D. The annual drilling, redrilling, well abandonment, workover, and well pad restoration plan shall comply with the provisions of this subsection, and shall include the following:

1. The maximum number of wells proposed to be drilled or redrilled;
2. Approximate location of all wells proposed to be drilled or redrilled;
3. Approximate location of all proposed new well pads, including their size and dimensions;
4. Estimated target depth of all proposed wells and their estimated bottom hole locations (in GIS coordinates and with depth);
5. A discussion 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;
6. Location of all proposed well abandonments, if known, in accordance with DOGGR integrity testing program of idle wells;
7. Location of all well pads proposed to be abandoned and restored;
8. A proposed schedule and phasing of the drilling, redrilling, well abandonment, well pad abandonment, and restoration activities;
9. A discussion of the latest equipment and techniques that are proposed for use as part of the drilling and redrilling program to reduce environmental impacts; and
10. All engines used for drilling and redrilling operations shall be operated by muffled internal-combustion engines or by electric motors.

- E. Proven reasonable and feasible technological improvements, which are capable of reducing the environmental impacts of drilling and re-drilling shall be considered as they become, from time to time, available.
- F. All derricks and portable masts used for drilling, re-drilling, and workover shall meet the standards and specifications of the American Petroleum Institute as they presently exist or as may be amended.
- G. All drilling and re-drilling equipment shall be removed from the site within ninety days following the completion of drilling or re-drilling activities unless the equipment is to be used at the oil field within five days for drilling or re-drilling operations.
- H. All drilling sites shall be maintained in a neat and orderly fashion.
- I. Belt guards shall be required over all drive belts on drilling, re-drilling, and workover equipment. Guarding shall be as required by Title 8 of the California Code of Regulations, Section 6622, or as may be subsequently amended.
- J. The use of test wells on any oil and gas facility shall be limited to a period of eighteen months, at which point the operator must either obtain an abandonment and restoration permit for such wells, or obtain a CUP or DA for their use and operation as production wells.
- K. Aboveground pumpjack assemblies are prohibited and all oil and gas facilities are restricted to the exclusive use of submersible downhole pumping mechanisms for extraction. Additionally, any well already lawfully existing at the time of implementation of this ordinance using a pumpjack assembly that is extending its period of production beyond the amortization date established in Section 9189.22(a) shall have its aboveground pump replaced with a submersible downhole pumping mechanism. The pumpjack assembly, along with its motor and fuel system, shall be removed from the oil or gas facility site within thirty (30) days of the completion of the operation. It is the intent of this Subsection to uninterruptedly carry forward, and not extend, previously existing amortization periods for the removal of pumpjack assemblies and the installation of submersible downhole pumping mechanisms. The requirements of this subsection K are applicable to all oil and gas facility sites except for such facilities where the Petroleum Administrator determines that the use of submersible downhole pumping mechanisms is infeasible due to technical reasons or other circumstances which would specifically preclude the use of such technology.
- L. For any re-drilling of wells, the operator shall ensure that the portion of the well bore below the kickoff point for the re-drill has been plugged and abandoned to DOGGR standards.

9533 Standards for Pipelines

The operator shall comply with the following provisions related to pipelines throughout operation of an oil or gas facility:

9533.1 Pipeline Installations and Use

- A. Pipelines shall be used to transport petroleum products off-site to promote traffic safety and air quality.
- B. The use of a pipeline for transporting crude oil or gas may be a condition of approval for expansion of existing processing facilities or construction of new processing facilities.
- C. New pipeline corridors shall be consolidated with existing pipeline or electrical transmission corridors where feasible, unless there are overriding technical constraints or significant social, aesthetic, environmental or economic reasons not to do so.
- D. New pipelines shall be routed to avoid residential, recreational areas, and schools. Pipeline routing through recreational, commercial or special use zones shall be done in a manner that minimizes the impacts of potential spills by considering spill volumes, durations, and projected paths. New pipeline segments shall be equipped with automatic shutoff valves, or suitable alternatives approved by the Petroleum Administrator, so that each segment will be isolated in the event of a break.
- E. Upon completion of any new pipeline construction, the site shall be restored to the approximate previous grade and condition. All sites previously covered with vegetation shall be reseeded with the same or recovered with the previously removed vegetative materials, and shall include other measures as deemed necessary to prevent erosion until the vegetation can become established, and to promote visual and environmental quality, unless there are approved development plans for the site, in which case re-vegetation would not be necessary.
- F. Gas from wells shall be piped to centralized collection and processing facilities, rather than being flared, to preserve energy resources and air quality, and to reduce fire hazards and light sources. Oil shall also be piped to centralized collection and processing facilities, in order to minimize land use conflicts and environmental degradation, and to promote visual quality.
- G. Newly installed pipelines shall be designed, constructed, and all pipelines shall be tested, operated, and maintained in accordance with good oil field practice and applicable standards, as set forth in either the American Petroleum Institute (API) (API Rec. Prac. 1110, 3rd Ed., Dec. 1991, and API Spec. effective 1990), American Society for Testing and Materials (ASTM) (ASTM

Designation Stand. Spec., 1991), or Code of Federal Regulations 49, Part 192, as these standards may be amended, or other methods approved by the Petroleum Administrator. The Petroleum Administrator may require design or construction modifications, and/or additional testing and maintenance if the Petroleum Administrator determines that good practices and applicable standards have not been used. Good practice includes, but is not limited to:

1. Utilization of preventative methods such as cathodic protection and corrosion inhibitors, as appropriate, to minimize external and internal corrosion.
2. Utilization of pipeline coating or external wrapping for new or replaced buried or partially buried pipelines to minimize external corrosion. The coating or external wrapping shall have a high electrical resistance, be an effective moisture barrier, have good adhesion to the pipe, and be able to resist damage during handling.
3. Pipeline materials utilizing ERW type pipe.
4. Employment of equipment such as high and low-pressure or level alarms, automatic notification devices, and safety shut-down devices to minimize spill volume in the event of a leak.
5. If feasible, during piping relocation or replacement operations, locate any new pipelines or parts of a pipeline system above ground, preferably on supports or racks.

9533.2 Pipeline Testing and Maintenance

- A. Operators shall visually inspect all aboveground pipelines for leaks and corrosion on a monthly basis.
- B. The operator shall install a leak detection system for crude pipelines. The system shall include pressure and flow meters, flow balancing, supervisor control and data acquisition system, and a computer alarm system in the event of a suspected leak. Temperature, pressure, and flow shall be monitored at each pipeline entry and exit. If any variable deviates by more than 10 percent of the normal operating range, the system shall trigger both audible and visual alarms. Flow balancing shall be conducted every 5 minutes, 1 hour, 24 hours, and 48 hours with the accuracy defined once the system is established and tested and approved by the Petroleum Administrator.
- C. The Petroleum Administrator may order such tests or inspections deemed necessary to establish the reliability of any pipeline system. Repair, replacement, or cathodic protection may be required under the jurisdiction of the CSFM for offsite pipelines.

D. Any pipeline that has had a leak resulting in the release of a reportable quantity shall be pressure tested to verify integrity prior to being placed back into service.

E. Pipe clamps, wooden plugs or screw-in plugs shall not be used for any permanent repair approved by the Petroleum Administrator.

F. A mechanical integrity test shall be performed on all active pipelines that are gathering lines, and all urban pipelines over 4" in diameter, every two years. Pipelines less than 5 years old are exempt from the two year testing requirement. These tests shall be performed to ensure the pipeline integrity by using at least one of the following methods:

1. Nondestructive testing using ultrasonic or other techniques approved by the Petroleum Administrator, to determine wall thickness.
2. Hydrostatic testing using the guidelines recommended by API, or the method approved by the State Fire Marshal, Pipeline Safety and Enforcement Division.
3. Internal inspection devices such as a smart pig, as approved by the Petroleum Administrator.
4. Any other method of ensuring the integrity of a pipeline that is approved by the Petroleum Administrator.

Copies of test results shall be maintained in a local office of the operator and posted online on the same website that provides the monitoring results required in Section 9531.1 for five years and shall also be made available to the City, upon request. The operator shall repair and retest or remove from service any pipeline that fails the mechanical integrity test. The City shall be promptly notified in writing by the operator of any pipeline taken out of service due to a test failure.

9534 Temporary Buildings

During full production of an oil or gas facility no temporary buildings are allowed to be constructed or maintained anywhere at the facility.

9535 [Reserved]

9536 Prohibited Uses

The owner/operator shall not use or cause to be used hydraulic fracturing, acidizing, or any other well stimulation treatment. Notwithstanding any other provision of this article, it shall be unlawful

to use or cause to be used any land within the City for the purpose of conducting or enabling hydraulic fracturing, acidizing, or any other well stimulation treatment in conjunction with the production or extraction of oil, gas or other hydrocarbon substance from any subsurface location within the City, other than normal maintenance work that utilizes acidizing techniques. However, to the extent that any permittee demonstrates to the Petroleum Administrator, that (1) well stimulation, other than hydraulic fracturing, is necessary to recover the owner/operator's reasonable investment backed expectation established through investment made before the effective date of this ordinance; and (2) that such well stimulation will not create a nuisance due to an adverse impact on persons or property within the City, then the Petroleum Administrator may authorize such well stimulation pursuant to a permit issued pursuant to this ordinance.

9536.1 Violations of Prohibited Uses

Any operator who violates Section 9536 of this code shall be subject to the enforcement proceedings including those found in Sections 9512, 9513, and 9515 in addition to the following specifications:

- A. If an operator is found responsible for violation of Section 9537, the operator will be responsible for paying the City penalties fees of \$100,000 or more per day, depending on the severity of the violation at the discretion of the Petroleum Administrator.
- B. In addition to penalty fees, the Petroleum Administrator may also require an immediate shutdown of all operations at an oil and gas facility site where violations of Section 9537 have been identified, as long as the shutdown would not otherwise threaten public health, safety concerns or welfare.

Part 3. Development Standards For Well(s) or Site Abandonment, Re-abandonment, Site Restoration and Redevelopment

9537 Development Standards

The following development standards will be applied to all well or site abandonment, re-abandonment, site restoration, and redevelopment projects within the City, including any building permit involving a current or former oil or gas facility:

- A. Any demolition, abandonment, re-abandonment, restoration or redevelopment shall be adequately monitored by a qualified individual, funded by the permittee or operator and retained

by the City, to ensure compliance with those conditions designed to mitigate anticipated significant adverse effects on the environment and to provide recommendations in instances where effects were not anticipated or mitigated by the conditions imposed on the permit or entitlement. Pre-restoration and post-restoration surveys of sensitive resources shall be employed as appropriate to measure compliance.

- B. The site shall be assessed for previously unidentified contamination.
1. The permittee shall ensure that any discovery of contamination shall be reported to the Petroleum Administrator and the Los Angeles County Fire Department.
- C. The permittee shall diligently seek all necessary permit approvals, including revisions to an entitlement or the demolition, Abandonment, re-abandonment and restoration permit, if any are required, in order to remediate the contamination.
- D. The permittee, operator and owner shall be responsible for any cost to remediate the contamination on the site. This ordinance is not intended to limit the permittee, operator or owners' rights under the law to seek compensation from parties who have contributed to contamination of the site.
- E. The permittee shall ensure that appropriate notification has been recorded with the County Recorder to describe the presence and location of any contamination left in place under the authority of the Los Angeles County Fire Department.
- F. All abandoned or re-abandoned wells shall be leak tested subject to the following requirements:
1. All abandoned wells located within on the oil and gas facility site must be tested for gas leakage and visually inspected for oil leakage. The owner or responsible party shall apply to the Petroleum Administrator for an inspection permit to witness the testing. The leak test shall be completed utilizing a "GT-43" gas detection meter, or one of comparable quality approved in advance by the Petroleum Administrator, and shall be conducted by a state licensed geotechnical or civil engineer or state registered environmental assessor, class II, or the Petroleum Administrator, or designee, as determined necessary by the Petroleum Administrator.
 2. A methane assessment report is required for each tested well and shall be prepared per the City of LA DBS "Site Testing Standards for Methane" (P/BC 2014-101), as may be amended. A well vent and vent cone permit shall be obtained by the property owner or agent. The property owner or agent may use the City's consultant

to observe the leak test or be responsible for City consultant test fees. Following testing, a well vent and vent cone shall be installed to the satisfaction of the Petroleum Administrator and in compliance with the recommendations contained in the methane assessment report.

3. The submitted leak test report shall be prepared by a state licensed geotechnical or civil engineer or state registered environmental assessor, class II. A well shall be considered leaking if the leak test report indicates the meter read is greater than the lower explosive limit which is set at 500 parts per million.
4. An approved leak test report is valid for 24 months from acceptance by the Petroleum Administrator. If a building permit has not been issued by this time, retesting is required. Following all testing and inspection, the test area shall be returned to its previous state to the satisfaction of the City building official.
5. If there has not been a change to the well, no leak test is required if a valid leak test report, accepted by the Petroleum Administrator and showing no leaks in excess of the lower explosive limit, has been completed for an abandoned or re-abandoned well within the prior 24 months.

G. Prior to any development or redevelopment of a current or former oil or gas facility site, or prior to abandoning or re-abandoning any well, the operator or owner shall:

1. Obtain permit(s) and abandon all idled wells consistent with Section 9510.3 and provide proof the wells are abandoned consistent with standards recommended or required by DOGGR to the satisfaction of the Petroleum Administrator. Permits shall not be required if the idled well is scheduled to actively produce oil or natural gas, or used for injection, as part of the development or redevelopment of a former oil or gas facility and if said production or injection occurs within 5 years of issuance of a CUP or DA under this ordinance.
2. Obtain permit(s) consistent with Section 9510.3 to re-abandon all previously abandoned wells that do not meet standards recommended or required by DOGGR for abandonment in effect at the time, and provide proof the wells are re-abandoned consistent with standards recommended or required by DOGGR to the satisfaction of the Petroleum Administrator. Permits shall not be required if re-entry of an abandoned well is scheduled to occur within 5 years of issuance of a CUP or DA under this ordinance, and if re-entry actually occurs within that period of time.

3. In lieu of Subsections C(1) and (2), above, obtain a deferral covenant from the City requiring abandonment or re-abandonment to standards recommended or required by DOGGR, or equivalent standards as determined by the Petroleum Administrator, at a specific time or upon the occurrence of a future event. The deferral covenant shall be approved as to form by the City Attorney, contain a provision to indemnify and hold harmless the City for damages related to wells not abandoned or re-abandoned consistent with standards recommended or required by DOGGR, and shall be recorded by the operator or owner with the County Clerk prior to approval.

H. Other Development Standards:

1. Permanent structures, or other construction that would be difficult or expensive to demolish, shall not be located on top of any abandoned oil or gas well such that access for a well abandonment rig or other well maintenance equipment is constrained or inhibited from access to the well in the event of a future oil or gas leak. Pervious improvements, such as landscaping and parking areas with adequate landscape buffers, may be located on top of a previously abandoned or re-abandoned well which has passed the leak test consistent with Subsection C of this Section.
2. The owner shall record declaration of a covenant, in a form subject to the review and approval of the City Attorney, putting future owners and occupants on notice of the following: the existence of abandoned oil wells on the site; that the wells within the wells have been leak tested and found not to leak; description of any methane mitigation measures employed; disclosure that access to these wells has been provided to address the fact that they may leak in the future causing potential harm; acknowledgment that the state may order the re-abandonment of any well should it leak in the future; acknowledgment that the state does not recommend building over wells; and releasing and indemnifying the City for issuing any project permit or entitlement for the project. The covenant shall run with the land, apply to future owners, and may only be released by the Petroleum Administrator.