OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 W. Ocean Boulevard, 9th Floor Long Beach. CA 90802

ORDINANCE NO.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LONG BEACH AMENDING THE LONG BEACH MUNICIPAL CODE BY ADDING CHAPTER 18.78
RELATING TO CONSTRUCTION IN THE VICINITY OF ABANDONED OIL WELLS

The City Council of the City of Long Beach ordains as follows:

Section 1. The Long Beach Municipal Code is amended by adding Chapter 18.78 to read as follows:

Chapter 18.78

Construction in the Vicinity of Abandoned Oil Wells

18.78.010 Applicability.

All construction activities on a privately-owned parcel or on a tract or parcel containing an abandoned oil/gas well or wells shall meet the requirements of this Chapter. Construction activities on a privately-owned parcel or on a tract or parcel with active or idle wells shall comply with Chapter 18.48 of this Code. Construction projects involving assembly uses, caregiving facilities/hospitals, or schools such as those with an "A," "I," or "E" occupancy classification, as well as all "high rise" occupancy classifications shall meet the current CALGEM standards.

18.78.020 Exemptions.

Additions or Modifications. Additions or modifications to existing structures that are less than fifty (50) percent of the existing floor area of

that structure, and which maintain the "Separation Rule" as defined herein are exempt from the provisions of this Chapter.

18.78.030 Definitions.

Unless otherwise expressly stated herein, the following words and terms shall, for the purpose of this Chapter, have the meaning set forth in this Section. Where the words or terms are not defined in this Section, Chapter 18.02 of this Code shall apply.

- A. "Applicant" means a permit applicant, developer, owner, permittee, operator, or a representative of the owner who is applying for a building or grading permit to construct in the vicinity of an abandoned oil/gas well(s);
- B. "Close Vicinity" means a well located within the Separation Rule of an abandoned well;
- C. "Construction Activity" means construction activity including, but not limited to, grading, paving, and/or structure development;
- D. "Geologic Energy Management Division" or "CALGEM" means the state of California agency, or any successor agency, responsible for overseeing the drilling, operation, maintenance, plugging or abandonment of oil, natural gas, or geothermal wells;
- E. "Development Coordinator" means the Building Official, or designated representative(s) with the authority to review construction activity in the vicinity of oil/gas wells;
- F. "Operator" means any person drilling, maintaining, operating, pumping, or in control of any well;
- G. "Peer Review" means a consultant/team pre-approved by the Development Coordinator that is charged with the review of oil/gas well abandonment;

H.	"Permittee" means any person or entity seeking to obtain a
permit from t	ne City;

- I. "Project Boundary" means the entire proposed construction site, parcel or tract, including the entire area of each and every site, parcel, or tract involved:
- J. "Qualified Professional" means a petroleum engineer currently registered in the State of California and possessing experience in oil/gas well abandonment:
- K. "Separation Rule" means providing ten (10) feet of separation on two sides of the well, fifty (50) feet of separation on the third side of the well, and the remaining side of the well open, with an unobstructed vertical clearance for well service and rig access;

A well will meet the Separation Rule if it meets the above definition or if the applicant can demonstrate to the Development Coordinator that the proposed project will maintain appropriate and safe standard/conventional rig access to the well.

18.78.040 Prerequisites.

Applicants shall complete the following prerequisite items prior to applying for a grading or building permit for construction within the project boundary:

- A. Entitlements. Obtain all of the required land use entitlements of Title 21 (Zoning);
- B. Identify all active, idle, or abandoned wells within the project boundary and all offsite active, idle, or abandoned wells within one hundred (100) feet of the proposed onsite structure(s);
- C. Construction Site Well Review. Complete and submit a Construction Site Well Review (CSWR) Application to CalGEM;

D).	Well Safety Evaluation.	Prepare a Well Safety	Evaluation pe
Section	18.78	3.050;		

E. Leak test Inspection Request. Submit a leak test inspection request to the Development Coordinator per Section 18.78.110.

18.78.050 Well Safety Evaluation Submittal requirements.

A well safety evaluation report shall be submitted to the Development Coordinator for wells within the project boundary and off-site wells within one hundred (100) feet of any proposed structure(s). The report shall include the following:

- A. Well Status Report. A Well Status Report by CALGEM, or any successor agency, must be current to within the last twelve (12) months of formal project submittal to Plan Check and be inclusive of all relevant well work. A duplicate of the entire data package submitted to CALGEM shall also be submitted to the Development Coordinator;
- B. Well Exhibit. A Well Exhibit shall be submitted to the Development Coordinator for review. The Well Exhibit shall contain of the following elements:
- 1. A Site plan that illustrates all active, idle, or abandoned wells and the location and function of all existing and proposed development, including, but not limited to, paved surfaces, auxiliary structures, and occupied structures within the property boundary. Off-site wells within one hundred (100) feet of a proposed structure shall also be shown on the site plan;
 - 2. For wells within the property boundary:
- a. Diagram and description of any wells' drill rig accessibility within twenty- four (24) hours of any emergency. Compliance with the Separation Rule shall be clearly shown. If inaccessible within

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twenty-four (24) hours, a detailed written plan to provide access, including an approximate minimum time when access will be provided, shall also be required; b. Results of leak testing: Applicants shall perform leak testing in accordance with Section 18.78.110; C. Oil Well Assessment: An oil well assessment shall be submitted for all wells not abandoned to current CalGEM, or successor agency standards that are located within the project boundary and/or within one hundred (100) feet of a proposed onsite structure. The oil well assessment shall include: 1. A Well bore diagram for each well; 2. The Well bore diagram shall include: The Well diameter; a. b. The Casing and liner specifications and setting depths; All cementing operations, including calculations of C. cement volumes:

d. Depths of various hydrocarbon zones and freshsaltwater interfaces: and

- Any other data required by the Development e. Coordinator to analyze the current conditions of the well, including casing recovery operations and the presence of debris in the well hole;
- D. Off-site wells within one hundred (100) feet of a proposed onsite structure: If information on a well is unavailable, wells shall be considered active in accordance with Chapter 18.48 of the Long Beach Municipal Code.
- E. Wells inaccessible by an emergency rig within twenty-four (24) hours will require further evaluation in accordance with Section 18.78.080.

18.78.060 Well abandonment request.

A. Equivalency Request. An Equivalency Standard Request shall be submitted to the Development Coordinator for wells not abandoned to the current CALGEM standards, and which are affected by Construction Activity. The Request shall include the following:

- 1. Statement. A written statement setting forth the basis for the request and substantiating any claim of impracticality or hardship, for a Code modification, or a finding of equivalency to the existing Code requirements for any proposed alternative materials, design, or methods of abandonment or equipment utilization;
- Any additional relevant information regarding the property, including nearby water injection wells, faults, floodplains, tsunami and/or seiche zones, landslide, or seismic consideration(s);
 - 3. Leak test results in accordance with Section 18.78.120;
- 4. Long-term Safety Evaluation pursuant to Section 18.78.090, for any development proposing to build in close proximity to, or over an abandoned well(s);
- 5. The Report shall be stamped, signed, and dated by a Qualified Professional:
- B. Review. The Development Coordinator shall have the authority to approve the well(s) "as-is", impose conditions in accordance with Section 18.78.220; or approve the Well Abandonment Equivalency request, and allow the well(s) to be abandoned in accordance with this Chapter, or deny the Well Abandonment Equivalency request if the Development Coordinator is not able to verify the information provided in the report;
- C. Wells within the project boundary and unaffected by

 Construction Activity, which are not abandoned to any approved current or

 prior CALGEM standard, may be required to undergo review by the

Development Coordinator. The Development Coordinator shall have the authority to approve the well(s) "as-is", or approve alternative abandonment methods, or impose appropriate development conditions.

18.78.070 Equivalency abandonment standard.

Construction proposed over, or within close proximity to, abandoned wells shall not be permitted unless the Development Coordinator has determined that the well(s) has been abandoned in accordance with CALGEM, or any successor agency's current abandonment standards, or to the City's equivalency standards. Equivalency abandonment requests must be reviewed and approved in accordance with Section 18.78.060 prior to abandonment, and in accordance with the following equivalency standards:

- A. A cement plug located at the depth of the last oil/gas zone produced from the well. All perforations shall be plugged with cement, and the plug shall extend at least one hundred (100) feet above the top of a landed liner, the uppermost perforations, the casing cementing point, the water shut-off holes, or the oil or gas zone, whichever is higher. If wellbore conditions prevent placement of the plug at the depth of the last zone produced from the well, approximately one hundred (100) feet of cement shall be placed inside and outside of the casing above (but as close as possible to) the last zone produced from the well, but no higher than the base of the fresh water zone;
- B. A cement plug located at the depth of the base of the freshwater zone in the well. If there is cement behind the casing across the fresh-saltwater interface, a one hundred (100) foot depth cement plug shall be placed inside the casing across the interface. If the top of the cement behind the casing is below the top of the highest saltwater sands, squeeze-cementing shall be required through perforations to protect the freshwater

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deposits. In addition, a one hundred (100) foot cement plug shall be placed inside the casing across the fresh-saltwater interface;

- C. A cement plug located at the surface. The hole and all annuli shall be plugged at the surface with a cement plug extending at least fifty (50) feet from the top of the cut-off well casing:
- D. Leak Test. Leak testing shall be performed per Section 18.78.120;
- E. Vent Cones. Vent cone(s) shall be installed in accordance with Section 18.78.140;
- F. Indemnity Agreement and Declaration of Covenant. The Applicant/Property Owner shall submit and execute an Indemnity Agreement per Section 18.78.200 and a Declaration of Covenant per Section 18.78.210 to the satisfaction of the City Attorney;
- G. Upon receipt of the City's approval per Section 18.78.220, the Applicant may obtain the required permit(s) in accordance with the City's Building Code requirements.

18.78.080 Wells not accessible.

- Α. Access. Due to the uncertainty of future conditions, Applicants are encouraged to provide rig access when proposing to develop in close proximity to, or over wells;
- B. Methane Mitigation. Wells with limited or no access shall be required to provide methane mitigation in accordance with Chapter 18.79 of this Code for construction projects being developed in close proximity to, or over wells, with no or limited rig access;
- C. Confirmation. If the City cannot verify the well abandonment to either CALGEM's current standard or the City's equivalency standard, the well shall be abandoned so that the well passes the leak test and the well

shall remain accessible for future testing and no building development shall occur in close proximity to, or over the well.

18.78.090 Long-term safety evaluation.

A. Purpose. Development projects with structures in close proximity to, or over an abandoned well, shall submit a Long-term safety evaluation;

B. Submittal. The Long-term safety evaluation shall provide a justification for any lack of rig access.

18.78.100 Above-well head mitigation.

The Applicant's Qualified Professional shall submit mitigation plans for Development Coordinator review in compliance with the City Standards for the well cone and vent system. The location of the well(s) and the associated vent piping system shall be noted on the site plan and the foundation plan, in addition to pages dedicated to the well protection system.

18.78.110 – Leak test request.

A leak test request shall be submitted to Development Coordinator setting forth the following in accordance with Building and Safety Bulletin BU-054.

18.78.120 Leak testing. Leak testing in accordance with Building and Safety Bulletin BU-054.

18.78.130 Vent cone.

Shall be installed in accordance with Building and Safety Bulletin BU-054.

18.78.140 Horizontal pipes.

Shall be installed in accordance with Building and Safety Bulletin BU-054.

18.78.150 Vent risers.

Vent risers shall be installed in accordance with Building and Safety Bulletin BU-054.

18.78.160 Site clean-up.

Any potential site cleanup shall be under the direction of City of Long Beach Health Officer or designee, and grading and compaction around the well head shall be per the grading permit requirements of the City.

18.78.170 Methane mitigation.

Building construction projects shall be mitigated in accordance with the requirements of Chapter 18.79 of this Code.

18.78.180 Exposure period.

A. Exposure period. If an oil well is abandoned through the City's Equivalency Standards, the associated leak testing is valid for the duration of one (1) year:

- B. Significant event. A leak test shall be performed to the satisfaction of the Development Coordinator in accordance with Section 18.78.120 if the site experiences a significant event such as an earthquake, flooding, fire or other natural or manmade events;
- C. Project Delay. Construction delays of more than one (1) year will require the owner/operator to perform a leak test pursuant Section 18.78.120;

OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 W. Ocean Boulevard, 9th Floor Long Beach. CA 90802 D. Speculative projects. Proposals to abandon a well in accordance with the City's equivalency process, but without a proposed development, shall be permitted in accordance with this Chapter. The Indemnity Agreement and Declaration of Covenant shall be recorded with the County Recorder's Office prior to issuance of the Well Abandonment Approval Notice.

18.78.200 Indemnity Agreement.

Upon project plan approval, the Applicant shall fully execute and record an "Indemnification for Construction in the Vicinity of Abandoned Oil Well(s)" in a format required by the City and approved by the City Attorney's Office for any wells that do not meet the current (at the time of property development) CALGEM standards for abandonment and/or maintenance accessibility or building separations.

18.78.210 Declaration of covenant.

Prior to final approval of any grading or building permit for development within the close proximity to, or over a former oil/ gas well, the permittee/applicant shall record a declaration of 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 based on the date that testing was performed; an acknowledgment that CALGEM may order the re-abandonment of any well should it leak in the future; an acknowledgment that CALGEM does not recommend building over wells; and releasing and indemnifying the City and its various employees and agents for issuing project permits or granting any approvals. The covenant shall run with the land, apply to future owners or

successors in interest, and may only be released only by the City in writing. The Declaration of Covenant shall be recorded with the County Recorder's Office prior to the issuance of any permits.

18.78.220 Notice of well abandonment.

A. Well Abandonment Request and Equivalency Standard Review. The Development Coordinator or designee, including, but not limited to, the City's Peer Review consultant, shall review the Well Safety Evaluation report and other relevant information provided by the applicant for well/s that are submitted for Well Abandonment Requests and Equivalency Standard considerations in order to determine if the well abandonment is adequate to prevent hydrocarbons from reaching the surface of the well. The determination shall be based on, at a minimum, a review of a history of all work performed on the well, and an independently constructed detailed wellbore diagram showing the current condition of the well;

- B. Safety Assessment Letter. The Development Coordinator or designee, including, but not limited to, a Peer Review Consultant, shall provide a Safety Assessment Letter based on provided\relevant project documentation to determine if the well(s) abandonment complies with the equivalency abandonment standard;
- C. Inspections. Field inspections for the well abandonment will be based on receiving a final CALGEM approval letter for wells that will be abandoned to current CALGEM standards. For a well abandonment that will be submitted through the City's "Equivalency Standards", a certification letter shall be required from the projects Qualified Professional Engineer.

OFFICE OF THE CITY ATTORNEY CHARLES PARKIN, City Attorney 411 W. Ocean Boulevard, 9th Floor Long Beach. CA 90802 18.78.230 Fees.

Well Safety Evaluation review fees consisting of peer review, well head inspection, leak test inspection, and Alternate Materials and Methods of Construction fees for oil well abandonment projects shall be paid in accordance with the latest Master Fee Resolution and City Schedule of Fees.

18.78.240 Post construction protocols.

The Owner/Applicant shall be responsible for monitoring and project maintenance.

18.78.250 Enforcement and violation.

The Building Official is hereby authorized and directed to enforce the provisions of this Chapter in accordance with Section 18.03.020.

18.78.260 Site restoration for vacated projects.

Should the developer/applicant decide not to continue site development, all excavations for any well discoveries shall be restored to their original condition prior to well discovery disturbance.

18.78.270 Adoption of administrative rules.

The City Manager, or designee, is authorized and directed to promptly adopt administrative rules, including but not limited to, Building and Safety Bulletins, supplemental to the provisions of this Ordinance as necessary or appropriate to implement the Ordinance. The provisions of this Ordinance and the rules adopted by the City Manager, or designee, shall be provided to property owners, developers, potential developers, and other interested members of the public to the widest extent practical. No person shall fail to

comply with any such regulation as adopted.

Section 2. The City Clerk shall certify to the passage of this ordinance by the City Council and cause it to be posted in three (3) conspicuous places in the City of Long Beach, and it shall take effect on the thirty-first (31st) day after it is approved by the Mayor.

I hereby certify that the foregoing ordinance was adopted by the City

Council of the City of Long Beach at its meeting of ________, 20______, by
the following vote:

Ayes:	Councilmembers:	
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Absent: Councilmembers:	Absent:	Councilmembers:
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Recusal(s):	Councilmembers:	
` ,		

City Clerk

Approved:			
11	(Data)	-	Marian