Oil and Gas Drilling Ordinance

Case Number: ENV-2022-4865-MND

Project Location: Citywide - Ordinance applicable within the boundaries of the City of Los Angeles, which encompasses approximately 465 square miles.

Community Plan Area: Citywide

Council District: Citywide

Project Description: The Project is a proposed Oil and Gas Drilling Ordinance (Oil Ordinance, Ordinance or Project) amending Sections 12.03, 12.20, 12.23, 12.24, and 13.01 of the Los Angeles Municipal Code (LAMC) to prohibit new oil and gas extraction and make existing extraction activities a nonconforming use in all zones within the City of Los Angeles (City). Specifically, the Ordinance amends the LAMC to (1) eliminate the provisions of the LAMC that allow for the creation of new "O" Oil Drilling Supplemental Use Districts; (2) end by-right oil and gas extraction in the M3-Heavy Industrial Zones; (3) declare existing oil and gas extraction within the City a nonconforming use to terminate within 20 years; and (4) prohibit new or expanded oil and gas extraction activities (such as the drilling of new wells or the redrilling or deepening of existing wells). The Ordinance permits maintenance of the wells that the Zoning Administrator determines is necessary to protect public health, safety or the environment. The Ordinance exempts from its requirements wells that are operated by a public utility that is regulated by the California Public Utilities Commission. Twenty years from the effective date of the Ordinance, all nonconforming non-exempt oil and gas extraction uses will terminate.

PREPARED BY:

The City of Los Angeles
Department of City Planning

September 2022

INITIAL STUDY

TABLE OF CONTENTS

Appendices

INITIAL STUDY

1 INTRODUCTION

This Initial Study (IS) document evaluates potential environmental effects resulting from the proposed Oil and Gas Drilling Ordinance amending the LAMC to prohibit new oil and gas extraction and make existing extraction activities a nonconforming use in all zones (Oil Ordinance or Ordinance or Project). The Project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). Therefore, this document has been prepared in compliance with the relevant provisions of CEQA and the *State CEQA Guidelines* as implemented by the City of Los Angeles (City). Based on the analysis provided within this Initial Study, the City has concluded that the Project can be mitigated to a less than significant level, resulting in the preparation of a Mitigated Negative Declaration. This Initial Study and Mitigated Negative Declaration are intended as informational documents and are ultimately required to be adopted by the decision maker prior to project approval by the City.

1.1 PURPOSE OF AN INITIAL STUDY

CEQA was enacted in 1970 with several basic purposes: (1) to inform governmental decision makers and the public about the potential significant environmental effects of proposed projects; (2) to identify ways that environmental damage can be avoided or significantly reduced; (3) to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures; and (4) to disclose to the public the reasons behind a project's approval even if significant environmental effects are anticipated.

The City of Los Angeles is the lead agency for this Project. The Los Angeles City Council instructed the Department of City Planning (DCP) to prepare the Project. DCP has determined that the Project is subject to CEQA, and the preparation of an Initial Study is required.

An Initial Study is a preliminary analysis conducted by the Lead Agency, in consultation with other agencies (responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the Initial Study concludes that the Project, even with mitigation, may have a significant effect on the environment, an Environmental Impact Report should be prepared; otherwise, the Lead Agency may adopt a Negative Declaration or a Mitigated Negative Declaration.

This Initial Study has been prepared in accordance with CEQA (Public Resources Code §21000 et seq.) and the *State CEQA Guidelines* (Title 14, California Code of Regulations, §15000 et seq.).

1.2 ORGANIZATION OF THE INITIAL STUDY

This Initial Study is organized into five sections as follows:

1. **Introduction:** Describes the purpose and content of the Initial Study and provides an overview of the CEQA process.
2. **Executive Summary:** Provides Project information, identifies key areas of environmental concern, and includes a determination whether the project may have a significant effect on the environment.
3. **Project Description**: Provides a description of the environmental setting and the Project, including project characteristics and a list of discretionary actions.
4. **Evaluation of Environmental Impacts**: Contains the completed Initial Study Checklist and discussion of the environmental factors that would be potentially affected by the Project.
5. **Conclusion:** Describes the overall findings of the Initial Study and recommends next steps.

1.3 CEQA PROCESS

In compliance with the *State CEQA Guidelines*, the City, as the Lead Agency for the Project, will provide opportunities for the public to participate in the environmental review process. As described below, throughout the CEQA process, an effort will be made to inform, contact, and solicit input on the Project from various government agencies and the general public, including stakeholders and other interested parties.

1.3.1 Initial Study Review Process

At the onset of the environmental review process, the City has prepared this Initial Study to determine if the Project may have a significant effect on the environment. This Initial Study determined that the Project does not have significant environmental impacts but will require mitigation measures to reduce impacts below a level of significance.

A Notice of Intent to Adopt a MND is provided to inform the general public, responsible agencies, trustee agencies, and the county clerk of the availability of the document and the locations where the document can be reviewed. A 30-day review period is identified to allow the public and agencies to review the document. The notice is mailed to any

interested parties and is noticed to the public through publication in a newspaper of general circulation.

The decision-making body then considers the MND, together with any comments received during the public-review process, and may adopt the MND and approve the project. In addition, when approving a project for which an MND has been prepared, the decision-making body must find that there is no substantial evidence that the project will have a significant effect on the environment, and that the MND reflects the lead agency's independent judgment and analysis.

INITIAL STUDY

2 EXECUTIVE SUMMARY

Project Title	Oil And Gas Drilling Ordinance
Environmental Case No.	ENV-2022-4865-MND
Related Cases	CPC-2022-4864-CA

Project Location	Citywide
Community Plan Area	Citywide
General Plan Designation	Varies
Zoning	Varies
Council District	Citywide

Lead Agency	City of Los Angeles
Staff Contact	Jennifer Torres
Address	200 N. Spring Street, Room 701 Los Angeles, California 90012
Phone Number	213-978-3094
Email	planning.oildrilling@lacity.org

Applicant	City of Los Angeles
Address	200 N. Spring Street, Room 701 Los Angeles, California 90012
Phone Number	213-978-3094

2.1 OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

(e.g., permits, financing approval, or participation agreement)

None.

2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Greenhouse Gas Emissions	☐ Public Services
☐ Agriculture & Forestry Resources	☐ Hazards & Hazardous Materials	☐ Recreation
☐ Air Quality	☐ Hydrology / Water Quality	☐ Transportation
☐ Biological Resources	☐ Land Use / Planning	☐ Tribal Cultural Resources
☐ Cultural Resources	☐ Mineral Resources	☐ Utilities / Service Systems
☐ Energy	☐ Noise	☐ Wildfire
☐ Geology / Soils	☐ Population / Housing	☐ Mandatory Findings of Significance

2.3 DETERMINATION

(To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions on the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Jennifer Torres	Planning Assistant
PRINTED NAME	TITLE
	September 12, 2022
SIGNATURE	DATE

2.4 EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of a mitigation measure has reduced an effect from "Potentially Significant Impact" to "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross referenced).

5) Earlier analysis must be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR, or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

6) Earlier Analysis Used. Identify and state where they are available for review.

    a) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

b) Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

7) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

8) Supporting Information Sources: A sources list should be attached, and other sources used or individuals contacted should be cited in the discussion.

9) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whichever format is selected.

10) The explanation of each issue should identify:

a) The significance criteria or threshold, if any, used to evaluate each question; and

b) The mitigation measure identified, if any, to reduce the impact to less than significance.

INITIAL STUDY

3 PROJECT DESCRIPTION

3.1 PROJECT SUMMARY

The Project is a proposed Oil and Gas Drilling Ordinance (Oil Ordinance or Ordinance or Project) amending Sections 12.03, 12.20, 12.23, 12.24, and 13.01 of the Los Angeles Municipal Code (LAMC) to prohibit new oil and gas extraction and make existing extraction activities a nonconforming use in all zones within the City of Los Angeles (City). Specifically, the Ordinance amends the LAMC to (1) eliminate the provisions of the LAMC that allow for the creation of new "O" Oil Drilling Supplemental Use Districts; (2) end by-right oil and gas extraction in the M3-Heavy Industrial Zones; (3) declare existing oil and gas extraction within the City a nonconforming use to terminate within 20 years; and (4) prohibit new or expanded oil and gas extraction activities (such as the drilling of new wells or the redrilling or deepening of existing wells). The Ordinance permits maintenance of the wells that the Zoning Administrator determines is necessary to protect public health, safety or the environment. The Ordinance exempts from its requirements wells that are operated by a public utility that is regulated by the California Public Utilities Commission. Twenty years from the effective date of the Ordinance, all nonconforming oil and gas extraction uses will terminate.

3.2 ENVIRONMENTAL SETTING

For the purpose of CEQA, the analysis of potential environmental impacts from a "project" is based upon a comparison of the potential impacts of a project with the baseline. The baseline is generally the existing conditions at the time the City commences the environmental review of the project (*CEQA Guidelines* Section 15125(a)). The Ordinance's allowance for any maintenance of wells that the Zoning Administrator determines is necessary to protect public health, safety or the environment will not change existing conditions, as these activities currently take place within the existing regulatory setting. The following provides a summary of the existing oil and gas extraction operations in the City and the regulatory framework governing these operations based upon data and information currently available.

3.2.1 Regulatory Framework

In the City, drilling sites and associated infrastructure are regulated by a variety of local, state, and federal agencies, which have their own distinct environmental monitoring and enforcement requirements as they relate to oil operations. The following describes the

primary regulatory requirements governing oil and gas extraction activities and the agencies tasked with the oversight of oil operations within the City.

A. Federal Regulatory Agencies

United States Environmental Protection Agency (EPA)

EPA is an agency of the United States federal government responsible for creating standards and laws that promote the health of individuals and the environment. The EPA regulates the manufacturing, processing, distribution, and use of chemicals and other pollutants and is charged with determining safe tolerance levels for chemicals and other pollutants in food, animal feed, and water. The EPA also runs programs to prevent, control, and respond to oil spills, control air pollution and forecast air pollution levels, and foster the manufacture of more fuel-efficient vehicles. The EPA works to enforce laws such as the Clean Air Act, the Safe Drinking Water Act, the National Environmental Education Act, and the Clean Water Act (CWA).

The Comprehensive Environmental Response Compensation, and Liability Act (CERCLA or Superfund) authorizes EPA to respond to releases, or threatened releases, of hazardous substances that might endanger public health, welfare, or the environment. It also grants EPA the authority to force parties responsible for environmental contamination to clean it up or to reimburse response costs incurred by EPA.

The Resource Conservation and Recovery Act (RCRA) is the federal public law that creates the framework for the proper management of hazardous and non-hazardous solid waste through the authority of the EPA.

With regard to the CWA, spill prevention, control and countermeasures (SPCC) regulations are designed to protect our nation’s waters from oil pollution caused by oil spills that could reach the waters of the United States or adjoining shorelines. The section of the CWA regulations known as the “sheen rule” provides the framework for determining whether a facility or vessel responsible for an oil spill must report the spill to the federal government. The Oil Pollution Act (OPA) of 1990 amended the CWA, and provided new requirements for contingency planning by government and industry under the National Oil and Hazardous Substances Pollution Contingency Plan. OPA also increased penalties for regulatory non-compliance, broadened the response and enforcement authorities of the federal government, and preserved state authority to establish laws governing oil spill prevention and response.

Occupational Safety and Health Administration (OSHA)

The General Duty Clause of the OSH Act (the law that created OSHA) requires employers to provide workers with a safe workplace that does not have any recognized hazards that

cause or are likely to cause death or serious injury. Exposures to hazards present in the oil and gas well drilling, servicing, and storage industry are addressed in specific standards for general industry, including federal law 29 CFR 1926 for site preparation and 29 CFR 1910 for operations.

B. State Regulatory Agencies

California Geologic Energy Management Division (CalGEM)

CalGEM is one of five divisions that comprise the California Department of Conservation. CalGEM ensures the safe exploration and development of energy resources. It is the state agency responsible for issuance of well permits for production and injection wells, and oversees the drilling, operation, maintenance, and plugging and abandonment of oil, natural gas, and geothermal wells.

CalGEM responsibilities are detailed in Section 3000 of the California Public Resources Code and Title 14, Chapter 4 of the California Code of Regulations (CCR). These regulations address issues such as well spacing, blow-out prevention devices, casing requirements, plugging and abandonment of wells, maintenance of facilities and safety systems, fencing, inspection frequency, and reporting requirements. Section 1774 of Title 14 CCR Division 2, Chapter 4 specifies maintenance practices related to oil field facilities and pipelines.

California Air Resources Board (CARB)

CARB is the primary state agency responsible for actions to protect public health from the harmful effects of air pollution and developing programs and actions to fight climate change. CARB approves the regional Air Quality Management Plans for incorporation into the State Implementation Plan and is responsible for preparing those portions of the plan related to mobile source emissions. CARB implements the California Clean Air Act (CCAA) requirements, regulating emissions from motor vehicles and setting fuel standards. The CCAA established ambient air quality standards for ozone, PM10, PM2.5, CO, NO_2, SO_2, lead, visibility-reducing particles, sulfates, H_2S, and vinyl chloride. California standards are generally more stringent than the national standards.

Department of Toxic Substances Control (DTSC)

DTSC is a department of the California Environmental Protection Agency (CalEPA). DTSC protects the public health of communities and the environment from toxic contamination left behind from past industrial and commercial activities through its brownfields and environmental remediation programs under RCRA and CERCLA/Superfund, among other laws governing the cleanup of contaminated land, water, and air.

California State Water Resources Control Board

The State Water Board is housed within state government and is part of the CalEPA, and is tasked with protecting water quality by setting statewide policy, coordinating and supporting the Regional Board efforts, and reviewing petitions that contest Regional Board actions. Together with the regional boards, the State Water Board is authorized to implement the federal CWA in California. The State Water Board oversees certain well stimulation activities. The State Water Board is the lead on crude oil facilities, such as oil drill sites, that merit investigation for water contamination and remediation.

C. Regional Regulatory Agencies

California Regional Water Quality Control Board

There are nine regional water control boards statewide. Each regional board makes critical water quality decisions for its region, including setting standards, issuing waste discharge requirements, determining compliance with those requirements, and taking appropriate enforcement actions. The State Water Board and regional water boards do not permit oil and gas wells, but regional water boards do regulate oil and gas waste discharge ponds.

South Coast Air Quality Management District (SCAQMD)

The SCAQMD is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties. The agency is responsible for controlling emissions primarily from stationary sources of air pollution and developing and enforcing emission control rules and regulations in the South Coast Air Basin and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. By statute, SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the areas under the jurisdiction of the SCAQMD. Furthermore, SCAQMD must adopt rules and regulations that carry out the AQMP. The AQMP is a regional blueprint for how SCAQMD will achieve air quality standards and healthful air. The 2016 AQMP contained multiple goals promoting reductions of criteria air pollutants, greenhouse gases, and toxic air contaminants (TACs).

The SCAQMD also regulates oil and gas production equipment such as oil wells, flares, micro-turbines, gas separators, and other facility processing equipment. Under SCAQMD Rule 1148.2 (2013) - “Notification and Reporting Requirements for Oil and Gas Well and Chemical Suppliers,” onshore oil and gas well operators and chemical suppliers are required to electronically submit to the SCAQMD various types of reports related to well drilling, well completion, and well reworks.

SCAQMD Rule 1166 outlines safety requirements for excavation and ground disturbance on industrial and hazardous sites. Operators are required to obtain a Rule 1166 permit and follow all requirements which include handling rules for underground storage tanks, treatment of soil contaminated with volatile organic compounds, and debris/dust mitigation of potentially contaminated property soil. Operators must have a valid Rule 1166 permit throughout the duration of well abandonment and site decommissioning.

D. Local Regulatory Bodies in the City of Los Angeles

Department of City Planning

DCP is responsible for preparing, maintaining, and implementing a General Plan for the development of the City. The General Plan consists of the Framework Element, which provides overall guidance for the future of the City and other citywide elements including those that are State-mandated, including the Circulation, Noise, Housing, Open Space, Land Use, Conservation, and Safety elements.

DCP is also responsible for implementing the zoning code, which references oil and gas drilling and other related activities in LAMC Sections 12.03, 12.20, 12.23, 12.24, and 13.01.

Fire Department

The Los Angeles Fire Department (LAFD) is designated by the state of California as a Certified Unified Program Agency (CUPA) and is authorized to apply statewide standards to each facility within its jurisdiction that treats on site or generates hazardous waste, operates underground storage tanks, or stores hazardous materials. The LAFD Fire Prevention Bureau issues two types of permits to oil and gas well operators, including 1) a Division 4 Permit, an operational permit required to engage in the operation of an oil well and 2) an action permit for the drilling, re-drilling, or abandonment of an oil well.

Department of Building and Safety

The Los Angeles Department of Building and Safety (LADBS) provides permitting, plan check, inspection, and code enforcement services for residential and commercial buildings in the City. LADBS conducts inspections of oil and gas drill sites to ensure that construction and renovation work are completed properly. LADBS also enforces the required operating conditions for each established drill site.

Bureau of Sanitation, Watershed Protection Division

The City's Bureau of Sanitation, Watershed Protection Division (WPD) implements the Watershed Protection Program, which is intended to protect the beneficial uses of

receiving waters while complying with all flood control and pollution abandonment mandates. WPD enforces the City's Stormwater and Urban Runoff Pollution Control ordinance (LAMC Section 64.70) and responds to oil spills and environmental emergency events.

Los Angeles Department of Water and Power

The Los Angeles Department of Water and Power's (LADWP) oil and gas well oversight relates to groundwater and potential groundwater contamination. LADWP reviews and inspects methods regarding the drilling, production operations, and disposal of waste and can intervene to require changes when merited for the full protection of the public water supply (see LAMC 13.01).

Board of Public Works

The Petroleum Administrator serves as the Director of the City's Office of Petroleum and Natural Gas Administration and Safety Office under the Board of Public Works. Los Angeles Administrative Code (LAAC) Sections 19.48-19.50 address the duties of the Director with respect to the management of petroleum matters affecting the City. These include, but are not limited to, addressing all matters related directly or indirectly to petroleum exploration and production and any matters concerning the creation of oil well drilling districts under the LAMC. Sections 19.53-19.71 address duties including referrals, investigations of applications, consultation with experts, recommendations to decision makers, publications, conditions, award of leases or agreements, execution of leases, sureties, forfeitures, and reservations (subject to the State Lands Commission). The Petroleum Administrator is also responsible for the oversight of the City's pipeline franchise agreements.

3.2.2 Project Location

The Project is a citywide code amendment. The City has an approximate land area of 465 square miles (297,600 acres) with an estimated population of nearly 4.0 million residents (3,898,747), according to the 2020 Census. The City lies within Los Angeles County which encompasses 4,000 square miles, 88 incorporated cities, and more than 10 million residents (10,014,009), according to the 2020 Census. The City is divided into 15 Council Districts and 35 Community Plan Areas. More than 87 percent of the City is developed with urban uses.

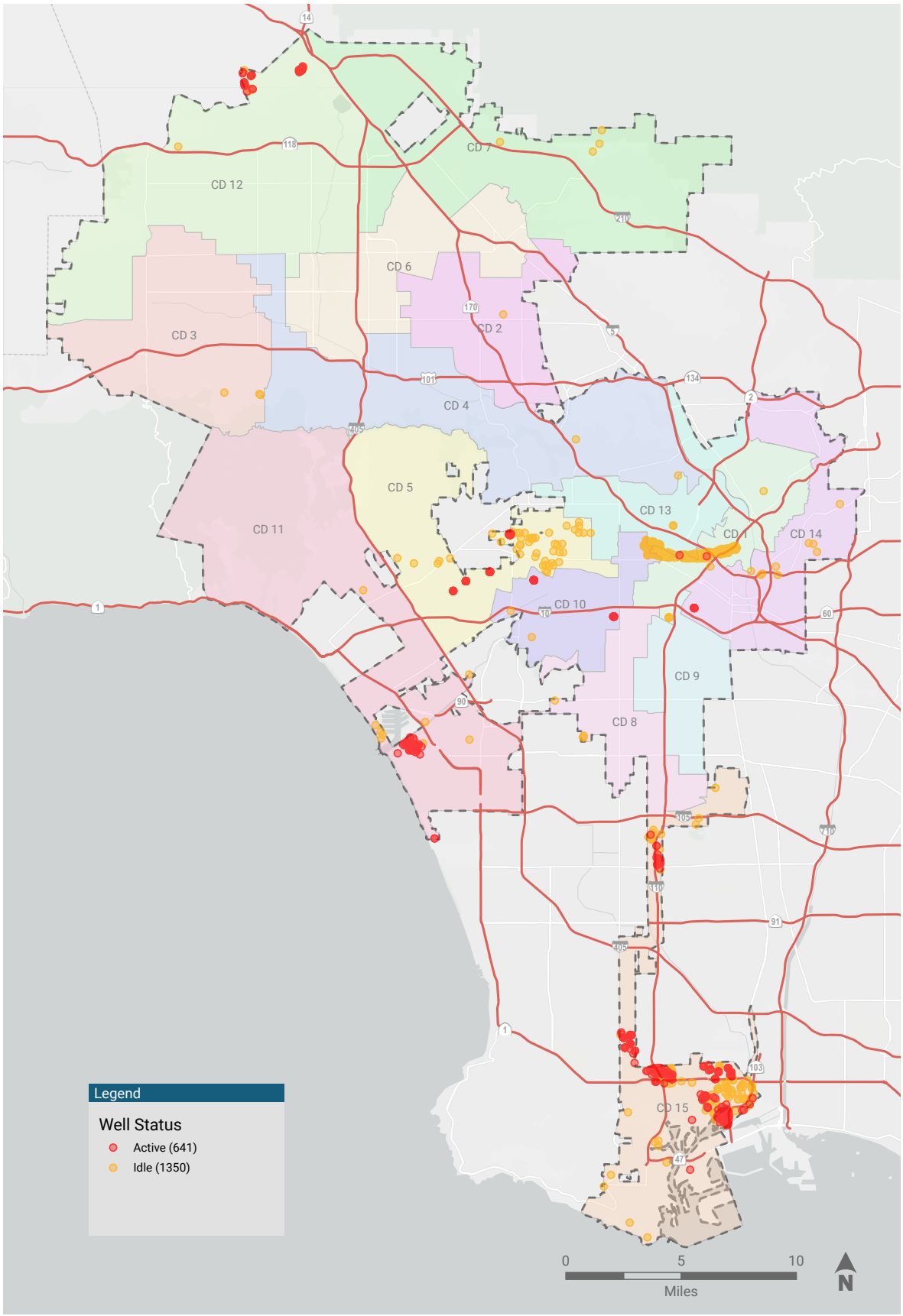
3.2.3 Existing Conditions

According to August 2022 data from CalGEM, the City has 26 oil and gas fields that intersect City boundaries and 5,273 oil and gas wells. There are approximately 641 active,

1,350 idle, 35 canceled, and 3,247 plugged wells.[1] Of the City's idle wells, as of July 2022, 56 are orphan wells deemed likely to have no responsible solvent operator. There are oil and gas facilities in nearly every section of the City.[2] See **Figure 1, Oil Well Locations Within the City,** and **Table 1, Oil Wells By Council District**. While some wells are situated in heavy industrial areas, others are located within residential neighborhoods and near community parks and schools. Much of the existing oil drilling and extraction is within underserved communities throughout the City. **Table 2, Oil Fields Within the City**, itemizes oil fields beneath the City, their time of discovery, and current status.

1 An active well is an oil well that has been drilled and completed, an idle well is inactive and not producing, but capable of being reactivated, a canceled well is one where a well permit was canceled prior to drilling, and a plugged well has been plugged and sealed to current standards.

2 There are two gas storage fields within the City, the Aliso Canyon and the Playa Del Rey Fields, which are both operated by the Southern California Gas Company (SoCalGas). SoCalGas is the primary operator of underground natural gas fields, natural gas storage wells, and natural gas transmission facilities within the City. No natural gas wells operated by public utilities would be impacted by the Ordinance.



SOURCE: City of Los Angeles, 2022

FIGURE **1**

IMPACT SCIENCES

Oil Wells Within the City of Los Angeles by Council District

1264.003•09/22

Table 1
Oil Wells By Council District

Council District	Active	Cancelled	Idle	Plugged	Total
1	2	0	622	300	924
2	0	0	1	3	4
3	0	0	3	2	5
4	0	0	2	3	5
5	103	2	101	514	720
6	0	0	0	11	11
7	0	0	4	28	32
8	0	0	4	47	51
9	0	0	0	10	10
10	71	4	82	76	233
11	38	1	12	335	386
12	43	2	6	87	138
13	0	0	217	41	258
14	12	1	25	52	90
15	372	25	271	1,738	2,406
Total	**641**	**35**	**1,350**	**3,247**	**5,273**

Source: City of Los Angeles, Department of City Planning and CalGEM, August 2022.

Table 2
Oil Fields Within the City

	Oil Field	Discovered	Status	Council District(s)
1	Aliso Canyon[a]	1938	Producing	12
2	Beverly Hills	1900	Producing	5, 10
3	Boyle Heights	1955	Abandoned	14
4	Cascade	1954	Producing	12
5	Cheviot Hills	1958	Producing	5
6	El Segundo	1935	Producing	11
7	Horse Meadows	1952	Abandoned	12
8	Hyperion	1944	Producing	11
9	Inglewood	1924	Producing	5, 8, 10
10	La Cienegas	1961	Producing	1, 8, 9, 10
11	Los Angeles City	1890	Producing	1, 13
12	Los Angeles Downtown	1965	Producing	9, 14
13	Mission	1961	Abandoned	12
14	Pacoima	1978	Abandoned	6, 7
15	Playa del Rey[a]	1929	Producing	11
16	Potrero	1928	Abandoned	11
17	Rosecrans	1927	Producing	15
18	Salt Lake	1902	Producing	4, 5
19	Salt Lake, South	1970	Producing	4, 5, 10
20	San Vicente	1968	Producing	5
21	Sawtelle	1965	Producing	5, 11
22	Torrance	1922	Producing	15
23	Union Station	1967	Abandoned	14
24	Venice Beach	1966	Abandoned	11
25	Wilmington	1932	Producing	15
26	Old Wilmington	1932	Abandoned	15

[a] *The Aliso Canyon and Playa Del Rey sites are former oil fields that are now gas storage facilities operated by the Southern California Gas Company and are not affected by the Project.*
Source: City of Los Angeles, Office of Petroleum and Natural Gas Administration & Safety, Council File No. 17-0447 - Feasibility of Amending Current City Land Use Codes in Connection with Health Impacts at Oil and Gas Wells and Drill Sites, July 29, 2019.

As shown in **Table 3, Oil & Gas Drill Sites**, there are 17 drill sites (sites where multiple wells are concentrated) throughout the City where oil and gas operations occur. There are also nine abandoned drill sites in the City. As of 2019, approximately 67 percent of oil and gas wells are within drill sites.[3] The remaining wells are dispersed throughout the City in urban and rural locations.

Table 3
Oil & Gas Drill Sites

	Oil & Gas Drill Site	Council District
1	AllenCo	1
2	Jefferson	8
3	Murphy	10
4	West Pico	5
5	Rancho Park Golf Course	5
6	Hillcrest Country Club	5
7	San Vicente	5
8	Packard	10
9	Mission Visco	12
10	Aliso Canyon	12
11	Filipino Town	13
12	Echo Park	13
13	Broadway	14
14	Harbor Gateway 1	15
15	Harbor Gateway 2	15
16	Joughin	15
17	Banning/Warren E&P	15

Source: City of Los Angeles, Department of City Planning and CalGEM, August 2022.

3 City of Los Angeles, Office of Petroleum and Natural Gas Administration & Safety, Council File No. 17-0447 - Feasibility of Amending Current City Land Use Codes in Connection with Health Impacts at Oil and Gas Wells and Drill Sites, July 29, 2019.

Wells are found in nearly all parts of the City, including, but not limited to, the communities of Wilmington, Harbor Gateway, Downtown, West Los Angeles, South Los Angeles, and the Northeast San Fernando Valley. While some wells are situated in heavy industrial areas, others are located in neighborhoods within close proximity to residences, schools, and other sensitive uses. Based upon information currently available to the City, approximately 1,410 wells are within 50 feet and 2,112 wells are within 100 feet of sensitive land uses identified as residences, schools, parks, daycares, nursing homes, or hospitals. For a list of sensitive receptors located in proximity to wells throughout the City, please refer to the Air Quality & Greenhouse Gas Technical Report (**Appendix A** to this Initial Study) and the Noise & Vibration Technical Report (**Appendix B** to this Initial Study).

In 2017, the average daily crude oil production rate from within the City was estimated to be 7,600 to 8,000 barrels of oil per day (BOPD).[4] The standard volumetric measurement of a barrel of crude oil is forty-two (42) gallons. The annual cumulative oil production in 2017 was equivalent to 2.5 million barrels (bbl) of oil.[5] Oil and gas production in the City represents approximately two percent of the state's total production.[6]

3.3 DESCRIPTION OF PROJECT

3.3.1 Project Background & Overview

The Los Angeles geological basin has one of the highest concentrations of crude oil per acre in the world. There are thousands of feet of oil-bearing sandstone rock formations underlying the City and the surrounding areas in Orange and Los Angeles Counties. In 1892, Edward Doheny and Charles Canfield drilled the first successful oil well in the Los Angeles City Oil Field (modern day Echo Park). Their discovery set off a series of major oil discoveries in the early 1900s and led to the City's first major population boom.[7]

By the 1930s, California was producing nearly one-quarter of the world's oil output. Oil extraction activities played a key part in Los Angeles' industrialization and growth over the ensuing decades. Today, Los Angeles is one of the largest urban oil fields in the

4 City of Los Angeles, Department of Public Works Office of the Petroleum and Natural Gas Administration and Safety. Oil and Gas Health Report, 2019. http://clkrep.lacity.org/onlinedocs/2017/17-0447_pc_b_10-15-19.pdf, accessed September 12, 2022

5 David Rigby and Michael Shin. The Oil and Gas Extraction Sector in the City of Los Angeles. October 2017. Available online at: https://clkrep.lacity.org/onlinedocs/2017/17-0447_misc_81A_07-29-2019.pdf, accessed September 12, 2022.

6 City of Los Angeles, Office of Petroleum and Natural Gas Administration & Safety. Oil & Gas Health Report. 2019. Available online at: http://clkrep.lacity.org/onlinedocs/2017/17-0447_pc_b_10-15-19.pdf, accessed September 12, 2022.

7 City of Los Angeles, Office of Petroleum and Natural Gas Administration & Safety, Council File No. 17-0447 - Feasibility of Amending Current City Land Use Codes in Connection with Health Impacts at Oil and Gas Wells and Drill Sites, July 29, 2019.

country, with drill sites and oil wells found in nearly all parts of the City, including, but not limited to, the communities of Wilmington, Harbor Gateway, Downtown, West Los Angeles, South Los Angeles, and the Northeast San Fernando Valley.

Oil and natural gas extraction is known as an upstream process because it includes the extraction and initial separation of oil, water and natural gas from hydrocarbon formations, but not the subsequent transportation, processing and storage (midstream) or the refining of petroleum or marketing and use of petroleum products (downstream). An upstream oil and natural gas producer sells the oil from the field where it is produced to a midstream pipeline company which transports oil and natural gas to downstream companies that operate refineries (or natural gas to utilities to operate power plants, and to natural gas storage and distribution facilities). These different activities are conducted by specialized companies and governed by sector-specific regulations. Upstream oil and natural gas extraction is thus distinct in terms of both operations and regulations from midstream pipeline companies, downstream refining and marketing companies and utilities that operate natural gas storage facilities and power plants that sell natural gas and electricity. The activities addressed by the ordinance are limited to upstream activities.

Petroleum production in most fields in the City and most of the Los Angeles Basin has several natural characteristics that are distinct to each field's specific geometry, depth, sulfur content and production volume. Oil and natural gas wells in the City are distinguished by their low pressures and low flow rates. These facilities also typically hold small fluid volumes, since the oil is generally sent directly by pipeline to local refineries. In addition, the gas-to-oil ratio[8] is very low in the Los Angeles Basin, which means that it is typically less volatile and generates lower air emissions of methane and volatile organic compounds. The water to oil ratio[9] is very high in Los Angeles, which means that the vast majority of the fluid produced is water rather than oil or gas. After the oil is separated, the water is either disposed of via a local sanitation district or re-injected into the subsurface formation.

Although oil production was a defining feature of Los Angeles' early development, this is no longer the case. The need to prioritize Angelenos' health and safety and keep up with national and statewide efforts to become energy efficient and independent led to a 2017 motion (CF-17-0447)[10] to the Council. The motion directed DCP, with the assistance of the City Attorney and the Petroleum Administrator, to provide a comprehensive analysis regarding possible implementation of changes to the City's land use codes relative to oil and gas development. The motion included consideration of no oil or gas wells to be

8 The gas to oil ratio is a measure of the natural gas content in the produced fluid form the formation

9 The water to oil ratio is a measure of the water content in the production fluid.

10 City of Los Angeles Department of City Planning, Health, Mental Health, and Education Committee. Motion CF-17-0447. August 2017. Available online: https://clkrep.lacity.org/onlinedocs/2017/17-0447_mot_04-19-2017.pdf

located within a certain setback from sensitive uses, essentially by making those wells nonconforming uses. Secondarily, the motion included a directive to prepare an amortization period to determine the way nonconforming wells could be phased out of operation. The purpose of the motion was to address health risk concern associated with oil and gas development within urban areas, with the concern that the closer oil and gas wells are to sensitive uses, the higher the risk.

The Board of Public Works issued a report on July 29, 2019, regarding the feasibility of amending the current land use codes for oil wells and drill sites. The report largely focused on creating setbacks from sensitive uses. On December 20, 2020, the item was heard before the Energy, Climate Change, and Environmental Justice (ECCEJ) Committee. The Committee introduced a modified approach that would instead make all neighborhood oil and gas drilling in the City a nonconforming use, regardless of the proximity to sensitive receptors. On April 20, 2021, the Planning and Land Use Management (PLUM) Committee considered and concurred with ECCEJ's recommendations and added additional instructions to the initial recommendations. Several of the instructions were referred to DCP and the Office of Petroleum and Natural Gas Administration and Safety (OPNGAS) to report back with a comprehensive analysis regarding the possible changes to the City's land use codes relative to oil and gas development as well as to report on the necessary budget and staff needs to further address oil wells in urban residential neighborhoods in the City. The Committee emphasized the need to address health impacts from oil and gas drilling on disadvantaged neighborhoods.

After the motion was heard in Budget and Finance, on January 26, 2022,[11] the City Council directed DCP, with the assistance of City Attorney, to prepare and present an ordinance to prohibit new oil and gas extraction and make extraction activities a nonconforming use in all zones. Pursuant to the City Council directive, DCP drafted a proposed citywide ordinance that would prohibit new oil and gas extraction and make existing extraction activities a nonconforming use in all zones.

At the direction of City Council, the City's Petroleum Administrator and OPNGAS conducted an extensive inventory of oil and gas facilities within the City, participated in public hearings, collected historical records from multiple private and public databases, synthesized thousands of pages of technical reports, and retained a consultant to study the potential health impacts of oil and gas wells and drill sites within the City. The findings of the report, which are in CF17-0447, show that activities related to oil and gas operations have been associated with many potential negative health and safety impacts, especially when they occur in close proximity to sensitive uses, such as residences, schools, or

11 City of Los Angeles. Budget and Finance Committee Report. November 2021. File No. 17-0447. Available online: https://clkrep.lacity.org/onlinedocs/2017/17-0447_misc_BF_112221_vF3%20(2).pdf

parks.[12] Consistent with the City's policies on climate change (i.e., L.A.'s Green New Deal, Sustainable City pLAn,[13] and the City's Health, Wellness and Equity Element of the General Plan "Plan for a Healthy Los Angeles"[14]), Los Angeles is introducing regulations that would phase out oil activities altogether. Many of these plans and policies encourage reduction in oil usage, generation of green energy, expansion of electrical infrastructure and acknowledgement of environmental justice issues. **Table 4, City Policies Supporting the Oil and Gas Ordinance**, and **Table 5, Regional and State Policies Supporting the Oil and Gas Ordinance**, provide a summary of policies with which the Project is consistent. Polices are generally grouped according to CEQA topic area.

Table 4
City Policies Supporting the Oil and Gas Ordinance

Aesthetics	
West Adams-Baldwin Hills-Leimert Community Plan	LU75-6 Mitigation of Impacts. Encourage adequate mitigation of noise, odor, glare, vibration, and aesthetic impacts. Support efforts to discourage continuous around-the-clock drilling.
Harbor Gateway Community Plan	Oil wells should be landscaped and maintained in an attractive condition, especially where adjacent to residential uses.
Air Quality	
Air Quality Element	4.1.1 Coordinate with all appropriate regional agencies the implementation of strategies for the integration of land use, transportation, and air quality policies
	5.1.2 Effect a reduction in energy consumption and shift to non-polluting sources of energy in its buildings and operations
	5.3.1 Support the development and use of equipment powered by electric or low-emitting fuels
A Plan for a Healthy Los Angeles	5.1 Reduce air pollution from stationary and mobile sources; protect human health and welfare and promote improved respiratory health.
	5.2 Reduce negative health impacts for people who live and work in close proximity to industrial uses and freeways through health promoting land uses and design solutions.
	5.4 Protect communities' health and well-being from exposure to noxious activities (for example, oil and gas extraction) that emit odors, noise, toxic, hazardous, or contaminant substances, materials, vapors, and others.
	5.7 5.7 Promote land use policies that reduce per capita greenhouse gas emissions, result in improved air quality and decreased air pollution, especially for children, seniors and others susceptible to respiratory diseases.
Safety Element	1.2.8 Industrial Emissions and Air Quality Monitoring. In keeping with the Air Quality Element, ensure that every Angeleno can breathe clean, healthy air by addressing air pollution from all sources, with a particular emphasis on prioritizing the health and wellbeing of overburdened families and delivering environmental justice.

12 Council File No 17-0447 – Feasibility of Amending Current City Land Use Codes in Connection with Health Impacts at Oil and Gas Wells and Drill Sites, July 29, 2019. Report from the Petroleum Administrator to the City Council.

13 Available on the City's website at: https://plan.lamayor.org/sites/default/files/pLAn_2019_final.pdf

14 Available on the City's website at: https://planning.lacity.org/odocument/2442d4df-34b3-4683-8eb9-b5ea1182782b/Plan_for_a_Healthy_Los_Angeles.pdf

L.A.'s Green New Deal	Implement and expand the Clean Up Green Up program to include one or more additional neighborhoods with high CalEnviroScreen scores
	Conduct fence-line air quality monitoring at L.A.'s refineries and oil and gas extraction sites
	Identify and analyze toxic air contaminants emitted from oil and gas production facilities
	Improve tracking for flaring emissions and create transparent database of air quality impacts
Energy	
Conservation Element	Policy 1: continue to encourage energy conservation and petroleum product reuse. Policy 3: continue to protect neighborhoods from potential accidents and subsidence associated with drilling, extraction and transport operations, consistent with California Department of Conservation, Division of Oil and Gas (renamed Geologic Energy Management)requirements
Safety Element	1.2.2 Renewable Energy. Aggressively pursue renewable energy sources, transitioning away from fossil-based sources of energy and toward 100% renewable energy sources.
	1.2.12 Prosperity and Green Jobs. Leverage investments in green infrastructure and systems to create inclusive economic opportunities for the city's workforce.
L.A.'s Green New Deal	Launch a new Virtual Net Energy Metering pilot program for multi-family households to go solar and implement a feasibility study to scale up program
	Provide community solar programs that expand access to solar savings to low-income and renter households: 1) Solar rooftops and 2) Shared solar program
	Engage 100% Renewable Energy Advisory Group on study inputs and partner on public outreach
	Increase cumulative MW of energy storage to 1,428-1,524 MW
	Launch residential thermostat demand response (DR) program, and increase cumulative MW of DR to 96 MW
	Create working group to prioritize and execute local air quality mitigation steps in highly impacted neighborhoods
	Install 15 MW of solar at the Port
	Install 3 MW of solar at City facilities
Greenhouse Gas Emissions	
West Adams-Baldwin Hills-Leimert Community Plan	CF20-5 Reduce Greenhouse Gas Emissions. Support efforts to promote the use of clean, renewable energy that is diverse in technology and location to decrease dependence on fossil fuels, reduce emissions of greenhouse gases, and increase the reliability of the power supply. (P143)
L.A.'s Green New Deal	Reduce fugitive and vented emissions of methane from new and existing oil and gas facilities through improved monitoring
Hazards and Hazardous Materials	
West Adams-Baldwin Hills-Leimert Community Plan	LU75-2 Periodic Review. Encourage regular and periodic discretionary review of any extraction activities involving hazardous materials.
	LU75-3 Community Health. Recommend that any extraction technology, including fracking, acidizing, or other technologies that involve potentially hazardous materials, has no negative impacts on public or environmental health. Support comprehensive plans, which strive to stop the release of chemicals from extraction sites into the groundwater or the surrounding environment.
	LU75-5 Hazardous Materials. Recommend that any decisions to approve the transportation or use of hazardous materials are based on sound understanding of potential public health impacts, and that adequate study and analysis has been conducted and demonstrated as part of the decision-making record.

Conservation Element	Policy 3: continue to protect neighborhoods from potential accidents and subsidence associated with drilling, extraction and transport operations, consistent with California Department of Conservation, Division of Oil and Gas (renamed Geologic Energy Management Division) requirements.
Safety Element	1.1.4 Health/Environmental Protection. Protect the public and workers from the release of hazardous materials and protect City water supplies and resources from contamination resulting from release or intrusion resulting from a disaster event, including protection of the environment and public from potential health and safety hazards associated with program implementation.
	1.2.1 Environmental Justice. In keeping with the Plan for a Healthy LA, build a fair, just and prosperous city where everyone experiences the benefits of a sustainable future by correcting the long running disproportionate impact of environmental burdens faced by low income families and communities of color.
	Program # 6 Identify, Analyze, and Mitigate Local Oil and Gas Risks.
L.A.'s Green New Deal	Enhance health and safety protection provisions for oil and gas production facilities
Land Use and Planning	
West Adams-Baldwin Hills-Leimert Community Plan	LU65-2 Capitalize on Emerging Industrial Sectors Capitalize on rehabilitation and adaptive reuse of existing structures, as well as the introduction of contextual new infill construction in areas such as the Hyde Park Industrial Corridor. Provide land use incentives and standards that facilitate the generation of high wage jobs and training for the community especially within the growing “clean-tech” and “greentech” sectors. (P13, P33, P286)
Wilmington Harbor City Community Plan	1-6.1 The enlargement of nonconforming, incompatible commercial and industrial uses within areas designated on the Plan map for residential land use shall be prohibited, and action shall be taken toward their removal on a scheduled basis in conformance with Section 12.23 of the Municipal Code.
	3-5.4 Seek the consolidation of surface oil extraction operations to free land for other uses, where feasible, to increase compatibility between oil operations and other land uses
L.A.'s Green New Deal	Evaluate the feasibility of a no drill health and safety buffer zone between oil and gas production facilities and communities
Mineral Resources	
West Adams-Baldwin Hills-Leimert Community Plan	LU75-1 Discretionary Review. Seek a high level of discretionary review for any changes to, or expansion of, existing oil extraction sites and activities so that the public may remain informed and involved, and so that appropriate environmental review may take place pursuant to the California Environmental Quality Act.
Wilmington Harbor City Community Plan	3-5.1 Regulate oil extraction activities and facilities in such a manner to enhance their compatibility with the surrounding community.
	3-5.3 Require, after January 1, 2000, that all drilling sites and oil production activities comply with the rules and regulations pertaining to urbanized areas. Alternatively, in the case of drilling sites and other oil production activities within a previously established drilling district, such sites and activities shall comply by January 1, 2000 with an Ordinance to be initiated which will (a) govern the maintenance and landscaping of drilling sites and other oil production activities; and (b) provide a program for the abandonment of drilling sites that no longer serve a useful function.
Conservation Element	Policy 2: continue to support state and federal bans on drilling in the Santa Monica Bay and on new drilling along the California coast in order to protect the San Pedro and Santa Monica bays from potential spills associated with drilling, extraction and transport operations.
L.A.'s Green New Deal	Reduce oil production by 40% below 2013 levels
	Coordinate with L.A. County to develop a sunset strategy for oil and gas production operations countywide
	Evaluate waste to energy technologies and conversion technology pilot projects to replace flares at oil drill sites; e.g., Micro Turbines

	Develop an inter-agency Task Force to update City processes for inspections and permitting of oil and gas extraction facilities
	Reduce oil production by 40% below 2013 levels
	Coordinate with L.A. County to develop a sunset strategy for oil and gas production operations countywide
	Develop an auditing and tracking program for oil and gas wells throughout the City
	Improve tracking for emissions from imported oil and gas
Transportation	
West Adams-Baldwin Hills-Leimert Community Plan	M12-3 Priority Parking for Alternative Fuel Vehicles. Encourage new commercial and retail developments to provide prioritized parking for shared vehicles, electric vehicles and vehicles using alternative fuels. (P209)
	M12-4 Connections for Electric Vehicles. Encourage new construction to include vehicle access to properly wired outdoor receptacles to accommodate zero emission vehicles and plug-in electric hybrids. (P109)
Harbor Gateway Community Plan	Improved bus service should be provided to more directly connect the various commercial, residential and industrial areas of this and adjacent communities.
Wilmington Harbor City Community Plan	1-2.1 Locate higher residential densities near commercial centers and major transit routes, where public service facilities, utilities, and topography will accommodate this development.
	Objective 10-1 To encourage improved local and express bus service through the Wilmington Harbor City community, and encourage park-and-ride facilities to interface with freeways, high occupancy vehicle (HOV) facilities, and transit routes.
	Objective 11-1 To pursue transportation management strategies that can maximize vehicle occupancy, minimize average trip length, and reduce the number of vehicle trips
Safety Element	1.2.7 Zero Emissions Vehicles. In keeping with the Mobility Plan, work toward zero emissions transportation and goods movement and increase zero emissions infrastructure including charging.
L.A.'s Green New Deal	Support development of cleaner rail transport, including investigating the feasibility of rail electrification
	Implement an updated Clean Truck Program with prioritization of zero emission trucks
	Ensure that municipally deployed EV chargers are distributed equitably around the city, with a focus on underserved and disadvantaged neighborhoods
	Update the Transportation Demand Management (TDM) ordinance
	Distribute 1,000 used electric vehicle (EV) rebates, 11,500 Level 2 EV charger rebates, and 75 DC fast charger rebates
	Develop roadmap for Fossil Fuel Free Zone by 2021; and implement by 2030
	100% Zero Emission school buses in Los Angeles
	100% of urban delivery vehicles are zero emission
	Electrify LA Metro’s Orange and Silver Lines
	Electrify 100% of paratransit shuttle buses
	Expand the use of shore power (AMP) or other emissions capturing technologies to 100% of ships as part of a suite of emissions reductions programs for ocean going vessels
	100% zero emission cargo handling equipment
	100% zero emissions on-road drayage trucks

Utilities and Service Systems	
L.A.'s Green New Deal	Make key upgrades to transmission and distribution systems, substations, and other equipment to enable renewable energy integration into the electricity grid
	Utilize transmission access from Intermountain Power Plant as a renewables hub, enabling over a gigawatt of renewable resources over the next 15 years
	Partner with local utilities and the LA2028 Olympic and Paralympic Organizing Committee to develop a clean energy plan
	Cancel plans to repower OTC gas power plants and cut in-basin power generation by natural gas 38%
	Provide community solar programs that expand access to solar savings to low income and renter households: 1) Solar rooftops and 2) Shared solar program
	Launch a new Virtual Net Energy Metering pilot program for multifamily households to go solar and implement feasibility study
	Require all newly built parking structures to have solar
	Expand Feed-in-Tariff (FiT), community solar, and increase cumulative MW of local solar to 500 MW

Table 5
Regional and State Policies Supporting the Oil and Gas Ordinance

Air Quality	
SCAG Connect SoCal	Goal 6. Support healthy and equitable communities
SCAQMD AQMP	EGM-01 Emission Reductions from New Development and Redevelopment
	EGM-03 Emission Reductions from Clean Construction Policy
	MOB-02A Emission Reductions at New Rail Yards and Intermodal Facilities
	MOB-05 Accelerated Retirement of Older Light-Duty and Medium-Duty Vehicles
	MOB-06 Accelerated Retirement of Older On-Road Heavy-Duty Vehicles
	Advanced Clean Fleets Regulation
	Zero Emissions Trucks Measure
	On-Road Motorcycle New Emissions Standards
	Clean Miles Standard
	Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation
	Clean Off-Road Fleet Recognition Program
	Cleaner Fuel and Visit Requirements for Aviation
	Cleaner Fuel and Vessel Requirements for Ocean-Going Vessels

Public Health Rulemaking	CalGEM will not approve any Notice of Intention to drill a new well with a new surface location within the setback exclusion area (3,200 of a sensitive receptor), except a well, such as an intercept well or a pressure relief well, that must be drilled to alleviate an immediate threat to public health and safety or the environment.
Greenhouse Gas Emissions	
2022 CARB Scoping Plan	Deploy ZEVs and reduce driving demand
	Coordinate supply of liquid fossil fuels with declining California fuel demand
	Decarbonize industrial energy supply
	Decarbonize buildings
	Reduce noncombustion emissions
Transportation	
SCAG Connect SoCal	Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
Utilities and Service Systems	
2022 CARB Scoping Plan	Generate clean electricity

Proposed Project

The Project is a proposed ordinance amending Sections 12.03, 12.20, 12.23, 12.24, and 13.01 of the Los Angeles Municipal Code (LAMC) to (1) eliminate the provisions of the LAMC that allow for the creation of new "O" Oil Drilling Supplemental Use Districts; (2) end by-right oil and gas extraction in the M3-Heavy Industrial Zones; (3) declare existing oil and gas extraction within the City a nonconforming use to terminate within 20 years; and (4) prohibit new or expanded oil and gas extraction activities (such as the drilling of new wells or the redrilling or deepening of existing wells). The Ordinance permits maintenance of the wells that the Zoning Administrator determines is necessary to protect public health, safety or the environment. Twenty years from the effective date of the Ordinance, all nonconforming oil and gas extraction uses will terminate.

This Ordinance is not applicable to (1) common carrier oil pipelines intended for regionally-coordinated transport of hydrocarbons; (2) service stations or like uses; (3) refineries; and (4) oil and injection wells that are verified to be plugged and abandoned in accordance with all applicable local, state, and federal laws, rules and regulations, including the California Statutes and Regulations overseen by the California Geologic Energy Management division (CalGEM), and LAFD and for which the well pad has been restored suitably for its subsequent use, and (5) any well operated by a public utility

regulated by the California Public Utilities Commission, including those operating at the Aliso Canyon and Playa Del Rey Gas Storage Fields.

The Ordinance does not set a specific timetable for the closure and abandonment of wells, regulate the abandonment of oil wells that have permanently ceased operation, or mandate or regulate the remediation of well sites where extraction has terminated permanently.[15]

3.3.2 Analysis & Assumptions

The Ordinance will make existing oil and gas drilling operations legally nonconforming uses in the City, subject to a 20-year amortization period. Existing oil and gas extraction activities may continue to operate until the end of the amortization period after which time all drilling-related activities must cease. After a well ceases operation, current regulations require that the well be abandoned and plugged. However, the current regulations do not establish a set time period by which the abandonment process must be completed after a well ceases operation. As stated above, the Ordinance does not regulate abandonment when well operations permanently cease.

Currently it is unknown as to how many oil wells will permanently cease operations prior to the 20 year expiration date. This is because the time period that each of the City's approximately 1,991 active and idle wells will permanently cease extraction and undergo abandonment depends on a number of individual factors. For example, once the Ordinance becomes effective, some operators may choose to conclude operations immediately, others. may continue to operate until the end of the 20-year amortization period. However, once a well permanently ceases operation, there is a financial and economic incentive for the oil well operator to complete the abandonment process to reduce the costs of maintaining the well site. Therefore, because there is no reasonable way to accurately predict the timeline for cessation and abandonment at the individual level, this analysis instead assumes all oil drilling will cease 20 years from the effective date of the Ordinance as required. Abandonment of individual wells may occur at any time during the 20-year timeframe, and potentially beyond the 20-year timeframe.

Although not regulated by the Ordinance, well abandonment is a reasonably foreseeable outcome for many of the wells currently operating in the City, although as stated above, no specific timeline for abandonment currently exists and the Ordinance does not include any regulations related to the timing of the abandonment of oil wells. When a well

15 Public Resources Code Section 21000 requires that a lead agency identify all feasible mitigation measures that will avoid or substantially lessen the significant environmental effects of the project. This MND identifies areas of potentially significant impacts that would occur as a result of abandonment activities (See Noise, Hazards, Geology and Soils). In accordance with CEQA, mitigation measures are proposed where such impacts could be reduced to less than significant by their imposition.

permanently stops operating, termination and abandonment activities will generally include (1) the cessation of production and drilling operations; (2) the closure and plugging of all oil and gas wells, including water flooding injection wells, except injection wells as permitted and demonstrated to be active and necessary by CalGEM; and (3) the plugging/capping of subsurface pipelines. Neither implementation of the Ordinance nor the oil well abandonment process should require excavation of previously undisturbed land and no new permanent structures would be constructed as part of the Project.

Termination activities of nonconforming oil and gas extraction must adhere to all applicable local, state, and federal laws, regulations, rules and standards, including the California Statutes and Regulations and all other requirements overseen by CalGEM as the principal regulatory authority for the closure of oil and gas extraction and production sites. Termination and abandonment activities will occur within previously disturbed and developed areas of the properties that encompass oil and gas extraction activities. In some cases, new access points may be necessary to allow for ingress/egress of equipment necessary to complete the abandonment of wells. However, no new permanent roads or permanent changes to existing roads would be necessary as part of the Project.

The closure of oil and gas wells entails plugging the wells in place in accordance with California Statutes and Regulations and all other applicable requirements as overseen by CalGEM. The process of well abandonment will be determined on a case-by-case basis under the regulatory supervision of CalGEM and the LAFD and will depend on individual site conditions such as type and depth of well. However, for the purposes of this environmental analysis, several generalized assumptions have been made based upon standard industry practice, existing regulations governing well abandonment, and case studies. While plugging and abandonment varies by well, there is a consistent set of procedures that are followed. Generally, the drill site's existing drilling or maintenance rig will be used to abandon the well and remove equipment from the well.[16] Well equipment will be removed from the site by truck. Cement trucks will also arrive onsite to fill the well at various depths over a span of several days. An operator may use in excess of 2,500 cubic feet of cement for one abandonment. The process entails removing equipment and filling the well with cement at different phases in order to ensure that it is safe to abandon the well at varying depths. At the end of each work day, the well site is closed and the rig is shut down in order to resume operations the following work day. CalGEM conducts inspections at certain milestones for this scope of work, including the following:

16 When a drilling or maintenance rig is not already on the well site, a rig will need to be brought to the site to complete the abandonment process.

- Operators conduct a series of pressure tests on the wells to identify that there are no leaks or that the pressure is unsafe to work on the well. A test to measure any levels of hydrogen sulfide is common.

- Operators use a drilling or maintenance rig to work on the well and prepare blowout prevention equipment for the well that will be plugged.

- CalGEM inspects the blowout prevention equipment to ensure that it is safe for the operator to continue with plugging and abandonment work.

- Operators use the rig to pull out various cables, tubing, and other connections from the well casing.

- Operators may require the use of brine water to clean out different segments of the well. If no debris or sand is observed, then the operators continue using the rig to remove cables, tubing, and more connections from the well.

- After the operator has removed the sufficient amount of tubings, casing, and connections and there are minimal amounts of debris observed, then the operator will bring a cement truck to begin pouring fresh water and cement mix down the well. CalGEM is required to observe this first segment of pouring as the inspector is looking to observe that the bottom hole is filled with the appropriate amount of cement.

- The operator continues to remove casings and tubings with support of the rig while also pouring cement down the well at depths deemed safe and clear enough to pour cement. Pressure testing of the well is frequently conducted to identify any safety risks.

- As the work nears the top segment of the well, the operator continues to use the rig and cement trucks are brought to the drill site to fill the well with cement. The ending segment can include up to 600 cubic feet of cement into the well's casings in order to displace any well fluids or debris. The operator will fill the well casing to the near very top and this process is observed by CalGEM and by the Los Angeles Fire Department.

- At the conclusion, the operator removes any blowout prevention equipment from the rig and the well is closed and steel welded with the API Number and the LAFD Well Number identified on the top cover.

Given the varied timeline of individual well abandonment and the fact the Ordinance does not establish any regulations related to well site remediation or redevelopment (except where mitigation measures are required to reduce identified potentially significant

impacts), it would be speculative to contemplate when site remediation would occur after the wells are abandoned and the types of redevelopment and future land uses that may occur on former drill sites. What might get built and at what intensity or scale is not possible to identify or analyze at this time. Therefore, the scope of analysis in this Initial Study is limited to (1) cessation of oil and gas extraction in the city and (2) abandonment activities that are reasonably foreseeable. The analysis does not examine impacts from remediation and/or future development. Those impacts would be analyzed in subsequent environmental analyses at either the programmatic or project level.

Methodology

The City's method assumes that well operations will cease in accordance with the requirements of the Ordnance and that the abandonment of oil wells that permanently cease operations is a reasonably foreseeable outcome. Furthermore, the methodology is based upon the fact the well abandonment activities will comply with existing federal, state and local laws, ordinances and regulations. To date, there is no specified timeline for the abandonment of wells, as operators could continue to operate through the 20-year amortization period.

Additionally, the City is not modifying its existing land use plans and is making limited amendments to its zoning code to make oil drilling a non-conforming use. The reasonably foreseeable result of this ordinance is the abandonment of wells, but not the redevelopment of any well sites, as such analysis of future land uses would be speculative.

While this environmental document appropriately presents a program level analysis, specific assumptions were made regarding the methods for well abandonment based on case studies, and other information made available to the City regarding the well abandonment process. As such, this analysis represents a good faith effort by the City to analyze the reasonably foreseeable environmental impacts resulting from the adoption and implementation of the proposed Ordinance. Detailed assumptions are provided in the Air Quality and Greenhouse Gas Technical Report and the Noise and Vibration Technical Report which are included as appendices to this Initial Study.

3.4 REQUESTED PERMITS AND APPROVALS

The Initial Study will analyze impacts associated with the Project and will provide environmental review sufficient for all necessary entitlements and public agency actions associated with the Project. The discretionary entitlements, reviews, permits and approvals required to implement the Project include, but are not necessarily limited to, an amendment to the Zoning Code, in accordance with City Charter Section 558 and LAMC Section 12.32, that will create the Oil and Gas Drilling Ordinance.

INITIAL STUDY

4 ENVIRONMENTAL IMPACT ANALYSIS

I. AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

a) Have a substantial adverse effect on a scenic vista?

No Impact.

The Project provides for the termination of all nonconforming oil uses over a 20-year amortization period, potentially resulting in the abandonment of existing wells. The cessation of oil extraction activities would not result in an adverse effect on a scenic vista as there would be no visible change at most sites as a result of the Project. In addition, abandonment activities will not result in significant physical changes to a scenic vista as

these activities do not include the construction of any new structures which could impede views or otherwise impact scenic vistas. Further, any abandonment activities would be temporarily occurring over the course of a few days or weeks (at most sites). As such, there would be no permanent change in any scenic vista. Further, the Oil Ordinance's prohibition on new oil and drilling[i] activities citywide will prevent the installation of additional facilities that could be visible from a scenic vista. As such, there will be no impacts.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, or other locally recognized desirable aesthetic natural feature within a state scenic highway?

No Impact.

Currently, the only portion of a scenic highway officially designated by the California Department of Transportation (Caltrans) in Los Angeles County is the 2 Freeway near La Canada-Flintridge.

Within the City of Los Angeles, a six-mile portion of the Pasadena Freeway (also known as the Arroyo Seco Historic Parkway) from milepost 25.7 to 31.9 is designated as a Historic Parkway and other portions of freeways are considered eligible but not officially designated including 2.5 miles of Topanga Canyon State Scenic Highway (State Route 27).[17] There are 14 wells within a half mile of radius of Scenic Highways in the City of Los Angeles. All 14 wells are inactive and plugged.[18]

Implementation of the Oil Ordinance will not result in any damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a state scenic highway as there would be no disturbance of previously undisturbed areas. As such, there would be no opportunity to damage scenic resources. Equipment in place at well sites would not be removed as a result of this Ordinance. The Ordinance prohibits the drilling of any new wells and the redrilling of existing wells which will prevent the installation of new facilities within these areas preventing the possibility of future impacts. Further, activities associated with well abandonment will be isolated to sites formerly used for oil and drilling activities and will not be located on land designated for state scenic highways. No impact would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those

17 California Scenic Highway Mapping System, available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways

18 Caltrans, California Scenic Highway System Map, 2022, available at: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa

that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact.

For purposes of analysis, the entirety of the City is considered an urbanized area.[19] Drill sites are located throughout the City, but many wells are also located in M3 zones, where only minimal standards relating to scenic quality exist, as shown in the project description. Some wells are located in residential zones where Community Plans are applicable containing scenic quality policies related to protecting single family and low-density neighborhoods from encroachment by higher density and other incompatible uses, protecting prominent vistas (such as hillsides), and protecting tree cover. The Ordinance would be consistent with these policies as it would, over the lifetime of the Ordinance, eliminate oil drilling in residential neighborhoods. Further, it would not conflict with any polices related to tree cover or protection of vistas as no new development would occur as a result of its implementation. As such, no impact would occur.

d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?

No Impact.

Light impacts are typically associated with the use of artificial light during the evening and nighttime hours. Glare may be a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass and reflective cladding materials, and may interfere with the safe operation of a motor vehicle on adjacent streets. Daytime glare is common in urban areas and is typically associated with mid- to high-rise buildings with exterior façades largely or entirely comprised of highly reflective glass or mirror-like materials. Nighttime glare is primarily associated with bright point-source lighting that contrasts with existing low ambient light conditions.

Implementation of the Ordinance will not result in substantial impacts related to light or glare, as none of the conditions described above would occur. No new development is authorized as part of the proposed Ordinance. Light sources associated with abandonment activities would be temporary in nature and would be required to adhere to all applicable regulations. Therefore, no impacts would occur.

19 According to *CEQA Guidelines* Section 15387 an “urbanized area” means a central city or a group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 persons per square mile.

II. AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d) Result in the loss of forest land or conversion of forest land to non-forest use?

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact.

Implementation of the Ordinance would not convert farmland to non-agricultural use, affect an agricultural preserve eligible for enrollment under a Williamson Act contract, or impact forest land or timberland. The Ordinance would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. The Ordinance does not propose any changes to existing zoning or any new development that could reduce agricultural uses within the City. Therefore, the Ordinance would have no impact related to agricultural and forestry resources as there are no such resources that would be impacted by the Ordinance.

III. AIR QUALITY

The following is based on the Project's *Air Quality and GHG Technical Report* included as **Appendix A** to this Initial Study. The responses to the checklist questions below summarize the Project's potential air quality impacts found therein. For additional details related to air quality setting, regulatory framework, assumptions, methodology, and impact analyses, please refer to **Appendix A** to this Initial Study.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant Impact.

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The 2016 AQMP was drafted by the SCAQMD and was developed in effort with CARB, SCAG, and the EPA to establish a program of rules and regulations to reduce air pollutant emissions to achieve California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS).[20] The plan's pollutant control strategies are

20 South Coast Air Quality Management District. 2016. *Air Quality Management Plan*. Available online at: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf, accessed August 16, 2022.

based on SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). While SCAG adopted the updated 2020-2045 RTP/SCS in September 2020, it has not been incorporated into an applicable air quality plan.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's 1993 CEQA Air Quality Handbook, and include the following:

- Consistency Criterion No. 1: The project will not result in an increase in the frequency or severity of an existing air quality violation, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

- Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP or increments based on the years of the project build-out phase.

The violations to which Consistency Criterion No. 1 refers are the CAAQS and the NAAQS. As evaluated under air quality checklist question (b) below, the Ordinance would not exceed the short-term standards or long-term standards and, thus, would not have the potential to violate any air quality standards. Thus, the Ordinance would be consistent with first criterion.

With respect to Consistency Criterion No. 2, the 2016 AQMP contains air pollutant reduction strategies based on SCAG's growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The Ordinance would not result in any changes to housing or population forecasts for the City or the region as a whole. Therefore, the Ordinance would not exceed the assumptions utilized to develop the 2016 AQMP and the Ordinance would be consistent with the second criterion. As such, because the Ordinance would be consistent with the criteria for demonstrating consistency with the AQMP, the Ordinance would not have the potential to conflict with or obstruct implementation of any applicable air quality plan and this impact is less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant Impact.

Short-Term and Temporary Air Quality Emissions

The abandonment of oil wells entails plugging the wells in place in accordance with California Statutes and Regulations and all other applicable requirements as overseen by

CalGEM. The process of well abandonment will be determined on a case-by-case basis under the regulatory supervision of CalGEM and the LAFD and will depend on individual site conditions such as type and depth of well. However, for the purposes of this environmental analysis, several generalized assumptions have been made based upon standard industry practice, existing regulations governing well abandonment, and case studies. While plugging and abandonment varies by well, there is a consistent set of procedures that are followed. Generally, the drill site's existing drilling or maintenance rig will be used to abandon the well and remove equipment from the well.[21] Well equipment will be removed from the site by truck. Cement trucks will also arrive onsite to fill the well at various depths over a span of several days. An operator may use in excess of 2,500 cubic feet of cement for one abandonment. The process entails removing equipment and filling the well with cement at different phases in order to ensure that it is safe to abandon the well at varying depths. At the end of each work day, the well site is closed and the rig is shut down in order to resume operations the following work day. See the **Project Description** section for the anticipated steps of well abandonment.

For purposes of estimating potential air quality associated with abandonment activities, it is assumed each well abandonment would last approximately two weeks (i.e., 10 work days), and on-site equipment would include one workover rig, one cement pump truck, one welder, and one tractor/loader/backhoe. On-road activity was estimated to include 10 worker trips per day (travel to and from the well locations) and 3 truck trips per day. This analysis conservatively assumes that all pieces of equipment would operate concurrently on a peak day, presenting a worst-case impact scenario.

Abandonment activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern include ozone-precursor pollutants (i.e., ROG and NOx), PM10, and PM2.5. Abandonment-generated emissions are short term and of temporary duration, lasting only as long as activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance. Abandonment activities would be required to comply with all applicable SCAQMD Rules, which may include, but not be limited to: Rule 401 (Visible Emissions), Rule 402 (Nuisance), Rule 403 (Fugitive Dust – Trucks and Unpaved Roads), Rule 1186 (PM10 Emissions from Paved and Unpaved Roads), Rule 1148 (Thermally Enhanced Oil Recovery Wells), Rule 1148.1 (Oil and Gas Extraction Wells), Rule 1148.2 (Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers), and Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines). These Rules are discussed in greater detail in Section 2.4, Regulatory Framework, of the Project's *Air Quality and GHG Technical*

21 When a drilling or maintenance rig is not on the well site, a rig will need to be brought to the site to complete the abandonment process.

Report (see **Appendix A** to this Initial Study). The estimated maximum daily abandonment related air quality emissions are summarized in **Table 6, Oil & Gas Well Abandonment Emissions (Per Well) – Pounds Per Day.**

Table 6
Oil & Gas Well Abandonment Emissions (Per Well) – Pounds Per Day

Source	ROG	NOx	CO	SO_2	PM10	PM2.5
Off-Road Equipment	0.51	4.69	5.79	0.01	0.19	0.17
Worker Trips	0.09	0.10	1.51	0.00	0.02	0.00
Truck Trips	0.01	0.31	0.14	0.01	0.02	0.01
Total Emissions	0.61	5.10	7.44	0.02	0.23	0.18
Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed?	*No*	*No*	*No*	*No*	*No*	*No*

*Source: Impact Sciences, September 2022. See **Appendix A** to this Initial Study.*

As shown in **Table 6**, on a per-well basis, the peak daily emissions generated during abandonment would not exceed any of the regional emission thresholds recommended by the SCAQMD. As discussed previously, abandonment of individual wells may occur at any time during the 20-year timeframe, and potentially beyond the 20-year timeframe. It would be speculative to assess how many wells would be abandoned during a given year, month, or peak day. Nevertheless, for illustrative purposes, based on the peak daily emissions identified in **Table 6** for a single well, it is possible for up to approximately 19 wells to be abandoned concurrently (i.e., overlapping on a peak day) without exceeding any of the regional emission thresholds recommended by the SCAQMD. Therefore, the Ordinance would not result in a cumulatively considerable net increase of any criteria air pollutant for which the region is in nonattainment and this impact is less than significant.

Long-Term Air Quality Emissions

Oil and gas operations throughout the City contribute to local and regional air quality conditions. Upon full implementation of the Ordinance, existing emission sources associated with oil and gas wells would no longer occur, and long-term air quality emissions would be decreased compared to existing emissions associated with oil and gas extraction throughout the City. The following discussion identifies the potential air quality emissions that may be avoided as a result of the Ordinance.

Long-term air quality emissions fall into two general categories: 1) worker commutes and 2) fugitive emissions. Typical emissions from worker commutes (i.e., motor vehicle trips) include ROG, NOx, CO, SOx, PM10 and PM2.5. Fugitive emissions include ROGs (also

referred to as volatile organic compounds) which may include but not be limited to pentane, n-pentane, hexane, ethane, and other longer-chain hydrocarbons. In general, fugitive emissions from oil and gas activities may be attributed to the following primary types of sources: fugitive equipment leaks; process venting; evaporation losses; disposal of waste gas streams (e.g., by venting or flaring), and accidents and equipment failures. Fugitive leaks from piping and equipment are typically small yet detectable emissions from equipment where there are joints, flanges, and seals. Although joints and flanges are typically bolted, small amounts of hydrocarbons may be emitted through leaky joints.

It should be noted that fugitive emissions are difficult to quantify with a high degree of accuracy and there remains substantial uncertainty in the emission factors and calculation methodologies for oil and gas activities. This is due to the numerous types of sources and many variables to be considered. The key emission assessment issues are: (a) use of simple extraction based emission factors is susceptible to excessive errors; (b) use of rigorous bottom-up approaches requires expert knowledge to apply and relies on detailed data which may be difficult and costly to obtain; and (c) measurement programs are time consuming and very costly to perform.[22] Nevertheless, **Table 7, Avoided Oil & Gas Air Quality Emissions – Pounds per Day**, has been included in an effort to illustrate the potential scope of air quality emissions that may be avoided as a result of the Ordinance.[23] Due to the programmatic nature of this analysis and the many variables at each oil and gas well throughout the City, the quantified estimates in **Table 7** are included as a good-faith effort for illustrative purposes. Furthermore, while it is clear the Ordinance would result in a net benefit to local and regional air quality conditions, the degree to which air quality emissions may be avoided under the Ordinance is not the basis for the impact determination. Because the Ordinance would reduce long-term air quality emissions compared to existing emissions associated with oil and gas extraction throughout the City, the Ordinance would not result in a cumulatively considerable net increase of any criteria air pollutant for which the region is in nonattainment and this impact is less than significant.

22 Intergovernmental Panel on Climate Change, Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, Fugitive Emissions From Oil and Natural Gas Activities.

23 See **Appendix A** to this Initial Study for further information related to calculations and assumptions utilized to prepare these estimates.

Table 7
Avoided Oil & Gas Air Quality Emissions – Pounds per Day

Source	ROG	NOx	CO	SO_2	PM10	PM2.5
Worker Emissions	1.12	1.11	16.60	0.06	2.71	0.50
Fugitive Emissions	807.66	--	--	--	--	--
Total Avoided Emissions	**808.78**	1.11	16.60	**0.06**	**2.71**	**0.50**

*Source: Impact Sciences, September 2022. See **Appendix A** to this Initial Study.*

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact.

Localized Air Quality Emissions

The SCAQMD has developed localized significance thresholds (LST) that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the applicable federal or State ambient air quality standard. LSTs are provided for each source receptor area (SRA) and various distances from the source of emissions. As the Ordinance is citywide, activities under the Ordinance could occur in parts of eight SRAs in the Coastal, Metropolitan, San Fernando Valley, and San Gabriel Valley areas.[24] The LSTs applicable to the Ordinance are presented in Table 7 of the Project's *Air Quality and GHG Technical Report* (see **Appendix A** to this Initial Study). The closest receptor distance in the SCAQMD's mass rate look-up tables is 25 meters. Projects that are located closer than 25 meters to the nearest receptor are directed to use the LSTs for receptors located within 25 meters. Abandonment activities would generate short-term localized emissions of criteria air pollutants. While abandonment-generated emissions are short term and of temporary duration, the emissions could be considered a significant air quality impact if the pollutants exceed the SCAQMD's LSTs.

As shown in **Table 8, Localized Oil & Gas Well Abandonment Emissions (Per Well) – Pounds Per Day**, the Ordinance would not exceed any of the identified localized thresholds of significance during abandonment. Therefore, the Ordinance would not

24 The SRAs include: SRA 1, described as Central Los Angeles County; SRA 2, described as Northwest Los Angeles County Coastal; SRA 3, described as Southwest Los Angeles County Coastal; SRA 4, described as South Los Angeles County Coastal; SRA 6, described as West San Fernando Valley; SRA 7, described as East San Fernando Valley; SRA 8, described as West San Gabriel Valley; and SRA 12, described as South Central Los Angeles County.

expose sensitive receptors to substantial air pollutant concentrations and these impacts would be less than significant.

Table 8
Localized Oil & Gas Well Abandonment Emissions (Per Well) – Pounds Per Day

Activity	NOx	CO	PM10	PM2.5
Abandonment	4.69	5.79	0.19	0.17
SCAQMD Localized Thresholds	*46.00*	*231.00*	*4.00*	*3.00*
Exceed Thresholds?	**No**	**No**	**No**	**No**

*Note: Based on the data in **Table 7**, the lowest (i.e., most restrictive) LST for each pollutant in any SRA citywide has been identified to present a conservative analysis.*
*Source: Impact Sciences, September 2022. See **Appendix A** to this Initial Study.*

Diesel Particulate Matter

The use of diesel-powered equipment and trucks during abandonment would result in the generation of diesel particulate matter (diesel PM) emissions. The amount to which the sensitive receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment and trucks would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current methodologies for conducting health risk assessments are associated with long term exposure periods (9, 30, and 70 years). As discussed previously, typical abandonment activities are expected to last for approximately 10 work days. Therefore, short-term abandonment activities would not have the potential to generate a significant health risk. Furthermore, abandonment activities would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than 5-minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions.[25] For these reasons, DPM emissions associated with abandonment would not expose sensitive receptors to substantial amounts of air toxics and this impact is less than significant.

25 California Air Resources Board. 2015. *Frequently Asked Questions Regulation for In-Use Off-Road Diesel-Fueled (Off-Road Regulation)*. Available online at: https://ww3.arb.ca.gov/msprog/ordiesel/faq/idlepolicyfaq.pdf, accessed August 16, 2022

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact.

The SCAQMD *CEQA Air Quality Handbook* (1993) identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding.

Existing oil and gas operations throughout the City contribute to localized emissions that lead to odors. Several compounds associated with the oil and gas industry can produce nuisance odors. Sulfur compounds found in oil and gas have very low odor detection levels. Many volatile compounds found in oil and gas (e.g., pentane, n-pentane, hexane, ethane, and other longer-chain hydrocarbons) typically have a petroleum or gasoline-type odor. An odor "event" is generally considered a scenario where odors are released and negatively impact the surrounding community, measured as generating odor complaints to the SCAQMD and confirmed by the SCAQMD as attributable to a specific source.

During abandonment activities, the two primary sources of potential odors are fugitive well emissions and diesel exhaust from equipment and trucks. As abandonment activities are anticipated to last approximately 10 work days, these emission sources and associated odors would be temporary and intermittent, and affecting only those receptors located in proximity to the wells. In addition, abandonment activities would be subject to SCAQMD Rule 402 (Nuisance) and California Code of Regulations, Title 13, sections 2449(d)(3) and 2485, which minimizes the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. These regulations would serve to minimize temporary and intermittent odors. As oil and gas operations cease, existing oil and gas well emissions leading to odors would no longer occur, and long-term odors would be decreased compared to existing conditions. Therefore, the Ordinance would not create other emissions leading to odors adversely affecting a substantial number of people, and this impact is less than significant.

IV. BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	☐	☐	☒	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact.

The Ordinance will prohibit new oil and gas extraction and require existing operations to cease within a 20-year amortization period. Twenty-five wells are located within Significant Ecological Areas (SEAs).[26] Six of these wells are active, while the remainder are inactive and plugged. Idle and abandoned wells are required to comply with LAFD regulations regarding brush clearance and other general maintenance that make these wells unlikely to provide biological resources in the form of habitat, species, or plant communities. Therefore, threatened, endangered, protected and sensitive species and habitats are not anticipated to be affected at these sites. Short-term abandonment activities that could occur at active and idle well sites will generally be limited to previously developed and disturbed areas and will not involve the removal of trees or vegetation that are habitat for candidate, sensitive, or special status species. In some cases, temporary accessways may be required to bring equipment to the well sites to complete the abandonment process. In these cases, the lead agency (i.e., the City) would require any necessary permits in accordance with applicable regulations and would ensure impacts to biological resources would not occur. Thus, impacts would be less than significant, and no mitigation is required.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant Impact.

26 City of Los Angeles GeoHub, Significant Ecological Area (SEA), 2022.

Existing active and idle oil wells currently undergo either regular operations or site maintenance activities (such as brush clearance in accordance with LAFD requirements). As such, it is unlikely that these sites would provide riparian habitat or support sensitive natural communities. While six active wells are located in SEAs, the Ordinance would not require new activity at the wells beyond compliance with local and state requirements for abandonment. Such activities would be limited to accessing the wells to follow proper procedures and would not add any new permanent structures to the sites that could adversely affect sensitive natural communities. Due to the limited nature of activity at the well sites, and the fact that wells are currently not providing any valuable habitat, impacts would be less than significant, and no mitigation is required.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact.

Short-term abandonment activities at existing well sites will be limited to previously developed and/or disturbed areas and, therefore, will not disturb any protected wetlands through direct removal, filling, hydrological interruption or other means. Therefore, impacts to wetlands would be less than significant and no mitigation is required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact.

As described in the preceding sections, well sites are not likely to offer any viable habitat. Further, the abandonment process generally requires limited disturbance to the surrounding area and would not interfere with any migratory species. Mature trees may be located near well sites. Although these trees are likely to be mainly ornamental and nonnative, they may provide suitable habitat, including nesting habitat, for migratory birds. Activities that occur pursuant to the Ordinance would be limited to accessing and abandoning the wells themselves and would not interfere with any mature trees where nesting could occur. Thus, impacts would be less than significant, and no mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact.

LAMC Sec. 46, the Tree Preservation Ordinance, (Ordinance No. 177,404) applies to protected trees (4 inches and greater in cumulative diameter at breast height) that are located on public and private properties. Protected tree removal requires a removal permit by the City of Los Angeles Department of Public Works (LADPW). Any act that may cause the failure or death of a protected tree requires inspection by the LADPW's Urban Forestry Division. The following tree species are protected: all native Oak tree species (*Quercus* spp, with the exception of scrub oak, *Quercus berberidifolia*), Western or California Sycamore (*Platanus racemosa*), California Bay (*Umbellularia californica*), Southern California Black Walnut (*Juglans californica*). In addition, on December 11, 2020, the City adopted Ordinance No. 186,873, extending protection status to include two native shrub species; Mexican elderberry (*Sambucus mexicana*) and toyon (*Heteromeles arbutifolia*). Activities associated with well operation cessation and subsequent abandonment would not involve the removal of trees or shrubs that would potentially conflict with the City's tree preservation policies and ordinance. Therefore, no impacts will occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact.

There are no Habitat Conservation Plans, or Natural Community Conservation Plans, or other approved habitat conservation plans that could be affected by the implementation of the Ordinance in the City of Los Angeles. As described above, the Ordinance does not have the possibility of impacting biological or sensitive resources that are protected within any existing plans. No impacts would occur, and no mitigation is required.

V. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

a) Cause a substantial adverse change in the significance of a historical resource as pursuant to *State CEQA Guidelines* §15064.5?

Less than Significant Impact.

The Ordinance will prohibit new oil and gas extraction and require existing operations to cease within a 20-year amortization period. Although not regulated by the Ordinance, well abandonment is a reasonably foreseeable outcome for many of the wells currently operating in the City. Therefore, the scope of this analysis is limited to the impacts of well cessation and abandonment. The anticipated abandonment activities are provided in the **Project Description**.

Section 15064.5(b) of the *CEQA Guidelines* states that a project would have a significant impact on historic resources if it would result in a substantial adverse change in the significance of a historic resource. Section 15064.5(a) of the *CEQA Guidelines* defines a historic resource as: 1) listed in, or determined to be eligible for listing, in the California Register of Historical Resources (CRHR); 2) included in a local register of historical resources; or 3) identified as significant in an historical resources survey. Any object, building, structure, site, area, place, record, or manuscript may be historically significant if the resource meets the criteria for listing on the CRHR.[27] The CRHR automatically includes all properties listed in or formally determined to be eligible for listing the National Register of Historic Places (NRHP).

To be eligible for listing in the NRHP, a property must be at least 50 years of age (unless it is of "exceptional importance") and be significant in American history and culture, architecture, or archaeology. A property of potential significance must meet one or more of the following four established criteria:

1. Associated with events that have made a significant contribution to American history;

2. Associated with the historically significant persons;

27 *CEQA Guidelines* §15064.5(a)(3).

3. Embody distinctive characteristics of a type, period, or method of construction/work of a master; possess high artistic values; or represent a significant and distinguishable entity; or

4. Yield information important in prehistory or history.

To be eligible for listing in the CRHR, a property generally must be at least 50 years of age and be significant at the local, state, or national level under one or more of the following four criteria:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history in California or the United States;

2. Associated with the lives of persons important to local, California, or national history;

3. Embody the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or

4. Yielded information important in the prehistory or history of the local area, California, or the country.

The CRHR consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process.

According to HistoricPlacesLA, there is one oil well facility, the Cardiff Tower Oil Well Facility (also known as the West Pico Drill site), which appears eligible for National Register, State Register, and local listing or designation as a historic resource. Five facilities are identified as requiring additional research to determine their eligibility as a historic resource: the Hillcrest Country Club Oil Wells, the Rancho Park Golf Course Oil Wells, the Los Angeles Downtown Oil Wells, the 23rd Street - St. James Place Oil Wells (Allenco Drill Site), and the San Vicente Drill Site. These are sites where oil operations are either currently occurring or have occurred in the past that may have historical significance for the City. Following a review of the national, State and local registers for designated historic resources, it was determined that none of the oil facilities are officially designated historic resources.[28,29,30] In addition, the Ordinance and any associated abandonment activities will not require demolition or substantial alterations of existing

28 National Park Service. National Register of Historic Places. Available online at: https://www.nps.gov/subjects/nationalregister/database-research.htm, accessed September 1, 2022.

29 California Office of Historic Preservation. California Historical Resources. Available online at: https://ohp.parks.ca.gov/ListedResources/, accessed September 1, 2022.

30 City of Los Angeles. Los Angeles Historic Resources Inventory. Available online at: http://historicplacesla.org/search, accessed September 1, 2022.

structures on these sites. Typical well abandonment activities as described in the **Project Description** would not require the removal of structures or otherwise cause a change to a historical resource. While some activities would occur on the site during the abandonment process (i.e., construction equipment and/or trucks accessing the well site) such activities would not permanently change the area surrounding the well. The reasonably foreseeable result of this Ordinance is the abandonment of wells, but not the redevelopment of any well sites, and such analysis of future land uses would be speculative at this time. Further, any potential impacts to eligible resources associated with future potential site redevelopment, change to, or demolition of such resources would require case-by-case CEQA analysis and historical resource review by the Los Angeles City Planning's Office of Historic Resources (OHR) before a demolition or building permit can be pulled. Based on the above, it is speculative at this time to identify the loss of any particular resource and it is not foreseeable that an impact could occur to a significant historical resource pursuant to *State CEQA Guidelines* §15064.5. Therefore, impacts would be less than significant, and mitigation is not required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to *State CEQA Guidelines* §15064.5?

Less than Significant Impact.

California Public Resources Code Section 21083.2 provides guidelines for accidental discovery of archeological resources during ground disturbing activities. It is expected that most properties developed with wells have been previously disturbed to depths beyond where archeological resources would be found. Therefore, archaeological resources are unlikely to be uncovered when wells are abandoned. Although minor grading may occur during the abandonment process, such activities would be limited to previously disturbed areas where resources are unlikely to be located due to past disturbance. No excavation of previously undisturbed soils would occur as a result of the Ordinance that would have the potential to result in newly discovered resources. Therefore, impacts would be less than significant and no mitigation is required.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact.

In the event that human remains are uncovered during ground-disturbing activities, there are regulatory provisions to address the handling of human remains in California Health and Safety Code Section 7050.5, Public Resource Code 5097.98, and *CEQA Guidelines* Section 15064.5(e). However, as described above, well sites have been previously excavated to depths beyond which it would be expected to find human remains. Although

minor grading may occur during the abandonment process, such activities would be limited to previously disturbed areas where resources are unlikely to be located due to past disturbance. Further, any temporary roadways necessary to access well sites or bring temporary equipment to the sites would be subject to review by the City through its permitting process. No excavation of previously undisturbed soils would occur as a result of the Ordinance that would have the potential to result in newly discovered resources. Therefore, impacts would be less than significant and no mitigation is required.

VI. ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact.

Although not regulated by the Ordinance, well abandonment is a reasonably foreseeable outcome for many of the wells currently operating in the City, although as stated previously, no specific timeline for abandonment currently exists and the Ordinance does not include any regulations related to the timing of the abandonment of oil wells. As such, for purposes of this analysis, there are two distinct phases that would have the potential to change consumption of energy resources: 1) Short-term and temporary abandonment related activities, and 2) Long-term changes attributable to the cessation of oil and gas extraction and operations.

Activities associated with abandonment would require the use of energy associated with worker vehicle trips, truck trips, and use of equipment. However, the consumption of

energy associated with these activities would be short term and temporary and would occur in accordance with all applicable rules and regulations associated with the operation of motor vehicles, trucks and equipment. As such, the consumption of energy during abandonment would not be wasteful, inefficient, or unnecessary. With respect to long-term changes associated with the consumption of energy resources, the Ordinance is a reflection of State, regional, and local goals to move away from reliance on oil and gas energy sources. The State has enacted numerous legislative regulations to reduce dependence on fossil fuels and improve energy efficiency. California's Renewable Portfolio Standards established by Senate Bill 1078 requires that 60% of electricity generation be produced from clean renewable sources by 2030 and that the state become carbon-free by 2045. This has contributed to California's move away from electricity powered by coal and natural gas and a progressive increase in the use of solar and wind energy sources. This has occurred for both utility scale energy generation as well as for new single-family residential uses which are required to meet their electricity needs by installing solar panels under the State's Title 24 building standards. For passenger vehicles, Executive Order N-79-20 would ban the sales of new gasoline and diesel passenger vehicles while requiring that only new zero-emission vehicles be sold by 2035. This Executive Order is also consistent with CARB's regulations transitioning from diesel trucks and vans to zero emission trucks, and public bus fleets to be fully electric by 2040. See also **Table 4** and **Table 5** in the **Project Description** for a comprehensive list of state, regional, and City policies that support the Ordinance.

As such, the Ordinance would not result in the wasteful, inefficient, or unnecessary consumption of energy resources and this impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact.

As discussed above, the Ordinance is a reflection of state, regional, and local goals to move away from reliance on oil and gas energy sources. The State has enacted numerous legislative regulations to reduce our dependence on fossil fuels and improve energy efficiency. California's Renewable Portfolio Standards established by Senate Bill 1078 requires that 60% of electricity generation be produced from clean renewable sources by 2030 and that the state become carbon-free by 2045. This has contributed to California's move away from electricity powered by coal and natural gas and a progressive increase in the use of solar and wind energy sources. This has occurred for both utility scale energy generation as well as for new single-family residential uses which are required to meet their electricity needs by installing solar panels under the State's Title 24 building standards. For passenger vehicles, Executive Order N-79-20 would ban

the sales of new gasoline and diesel passenger vehicles while requiring that only new zero-emission vehicles be sold by 2035. This Executive Order is also consistent with CARB's regulations transitioning from diesel trucks and vans to zero emission trucks, and public bus fleets to be fully electric by 2040. See also Tables 4 and 5 in the **Project Description** for a comprehensive list of state, regional, and City policies that support the Ordinance. As such, the Ordinance is reflective of state and local plans for renewable energy and energy efficiency through the elimination of oil drilling in the City. No impact would occur.

VII. GEOLOGY AND SOILS

In 2015, the California Supreme Court in *California Building Industry Association v. Bay Area Air Quality Management District* (*CBIA v. BAAQMD*), held that CEQA generally does not require a lead agency to consider the impacts of the existing environment on the future residents or users of a project. However, if a project exacerbates a condition in the existing environment, the lead agency is required to analyze the impact of that exacerbated condition on future residents and users of a project, as well as other impacted individuals.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c. Be located on a geologic unit that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

No Impact.

Fault rupture is the displacement that occurs along the surface of a fault during an earthquake. The California Geological Survey (CGS) designates Alquist-Priolo Earthquake Fault Zones, which are regulatory zones around active faults. These zones, which extend from 200 to 500 feet on each side of known active faults, identify areas where potential surface ruptures along active faults could prove hazardous and identify where special studies are required to characterize hazards to habitable structures. There are several Alquist-Priolo Fault Zones located in the City.

The Ordinance does not include the construction of any new structures, such as housing or other uses that could potentially result in risk including loss, injury, or death. Any abandonment activities that would occur indirectly as a result of the ordinance would be conducted in accordance with CalGEM and LAFD requirement to ensure safety. The Ordinance is limited to the cessation of oil drilling in the City and would not directly or indirectly exacerbate geologic hazards related to rupture, ground shaking, liquefaction or landslides. No impact would occur.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact.

Erosion is the movement of rock and soil from place to place and is a natural process. Common agents of erosion in the City include wind and flowing water. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. Erosion can be increased greatly by earthmoving activities if erosion-control measures are not used. Cessation of oil drilling at well sites would not result in any activities that could increase soil erosion. The abandonment process would be conducted in accordance with CalGEM and LAFD requirements and would not result in exposed topsoil or similar conditions where erosion could occur. No impacts would occur.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less than Significant Impact.

Landslides are movements of large masses of rock and/or soil. Landslide potential is generally the greatest for areas with steep and/or high slopes, low sheer strength, and increased water pressure. Subsidence is the sinking or gradual lowering of the earth's surface. Subsidence can result from either natural geologic and/or man-made causes and is found both on land and on the seafloor. Natural geologic causes are basin-downwarp, fault movement, sediment compaction, and relaxation of deep earth stresses. Man-made causes include groundwater pumping, mining, oil and gas production, river

channelization, and surface loading. A subsided area can vary in size from a few acres to thousands of square miles. Elevation losses can be from a fraction of an inch to tens of feet.

The Wilmington Oil Field underlies both the City of Los Angeles and the City of Long Beach. Oil or gas withdrawal subsidence has taken place extensively in the Long Beach Harbor area. At the center of the basin, subsidence amounted to as much as 30 feet at one time. To correct this problem, a full-scale water injection operation was initiated in 1958. Extensive repressurization of the reservoir through water injection has stabilized the area, which, along with substantial remedial land fill operations, has allowed continued use of port, petroleum production and commercial facilities.[31] The Long Beach Oil and Gas Department monitors subsidence to ensure land remains stable during oil extraction.

The Ordinance will result in the cessation of oil and gas extraction in the City of Los Angeles. While the cessation and subsequent abandonment activities that could occur would not increase potential for subsidence as they would reduce the amount of oil extracted from City oil wells, the Ordinance recognizes subsidence as a health and safety concern and includes the provision for health and safety related activities on wells as determined necessary by the Zoning Administrator. Therefore, the Ordinance would not cause a geologic unit to become unstable and impacts would be less than significant.

d) Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact.

The Project does not include the construction of any new structures that would have the potential to be located on expansive soil. Well abandonment activities would be required to comply with applicable CalGEM and LAFD requirements. As such, substantial direct or indirect risk to life or property would occur. No impact would occur.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact.

31 City of Long Beach General Plan Program, Public Safety Element, May 1975 (reprinted 2004).

The Project does not include the construction of any new structures that would require the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact.

Paleontological resources include fossil remains or traces of past life forms, including both vertebrate and invertebrate species, as well as plants. Paleontological resources are generally found within sedimentary rock formations. As described under **Cultural Resources**, above, although minor grading may occur during the abandonment process, such activities would be limited to previously disturbed areas where resources are unlikely to be located due to past disturbance. No excavation or previously undisturbed soils would occur as a result of the Ordinance that would have the potential to result in newly discovered resources. Therefore, no impact would occur.

VIII. GREENHOUSE GAS EMISSIONS

The following is based on the Project's *Air Quality and GHG Technical Report* included as **Appendix A** to this Initial Study. The responses to the checklist questions below summarize the Project's potential GHG impacts found therein. For additional details related to GHG setting, regulatory framework, assumptions, methodology, and impact analyses, please refer to **Appendix A** to this Initial Study.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

The City's methodology for assessing the significance of a project's GHG impacts generally includes 1) an evaluation of a project's potential to generate GHG emissions,

and 2) if a project does generate a net increase in GHG emissions, an evaluation if the project conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Thus, because many projects in the City generate a net increase in GHG emissions, both GHG checklist questions are typically evaluated together. However, as discussed below, because the Ordinance would not have the potential to generate an increase in long-term GHG emissions, each checklist question has been evaluated individually.

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact.

Similar to the short-term and temporary air quality impact discussion provided previously (see **Air Quality** Section), activities associated with well abandonment also have the potential to generate short-term and temporary GHG emissions. Following the same assumptions utilized in the air quality impact discussion, the estimated abandonment related GHG emissions are summarized in **Table 9, Oil & Gas Well Abandonment GHG Emissions (Per Well)**. Because these emissions would be short-term and temporary, they are considered one-time GHG emission sources without the potential to increase long-term and recurring GHG emissions into the future. As discussed in further detail below, long-term and recurring GHG emissions would be decreased compared to existing GHG emissions associated with oil and gas operations throughout the City as oil and gas operations cease. Although not regulated by the Ordinance, well abandonment is a reasonably foreseeable outcome for many of the wells currently operating in the City. As such, the one-time GHG emissions associated with abandonment are a necessary step in the process to achieve long-term and recurring GHG reductions from terminating oil and gas operations throughout the City.

Table 9
Oil & Gas Well Abandonment GHG Emissions (Per Well)

Emissions Source	Metric Tons of Carbon Dioxide Equivalent (per year)[a]
Off-Road Equipment	3.88
Worker Trips	1.25
Truck Trips	1.05
Total GHG Emissions (Per Well)	**6.18**

a While abandonment would likely occur over a short period (i.e., 10 work days), the estimate is presented in metric tons per year as this is the standard unit of measurement to describe GHG emissions.
*Source: Impact Sciences, September 2022. See **Appendix A** to this Initial Study.*

As oil and gas wells cease operation, existing GHG emission sources associated with oil and gas wells and long-term GHG emissions would be decreased compared to existing emissions associated with oil and gas wells throughout the City. The following discussion identifies the potential GHG emissions that may be avoided as a result of the Ordinance.

Long-term GHG emissions fall into two general categories: 1) worker commutes and 2) fugitive emissions. In general, fugitive emissions from oil and gas activities may be attributed to the following primary types of sources: fugitive equipment leaks; process venting; evaporation losses; disposal of waste gas streams (e.g., by venting or flaring), and accidents and equipment failures. Fugitive leaks from piping and equipment are typically small yet detectable emissions from equipment where there are joints, flanges, and seals. Although joints and flanges are typically bolted, small amounts of hydrocarbons may be emitted through leaky joints.

It should be noted that fugitive emissions are difficult to quantify with a high degree of accuracy and there remains substantial uncertainty in the emission factors and calculation methodologies for oil and gas activities. This is due to the numerous types of sources and many variables to be considered. The key emission assessment issues are: (a) use of simple production-based emission factors is susceptible to excessive errors; (b) use of rigorous bottom-up approaches requires expert knowledge to apply and relies on detailed data which may be difficult and costly to obtain; and (c) measurement programs are time consuming and very costly to perform.[32] Nevertheless, **Table 10, Avoided Oil & Gas GHG Emissions**, has been included as a good-faith effort to illustrate the potential scope of GHG emissions that may be avoided as a result of the Ordinance.[33] Due to the programmatic nature of this analysis and the many variables at each oil and gas well throughout the City, the quantified estimates in **Table 10** are included for illustrative purposes. Furthermore, while it is clear the Ordinance would result in a net benefit to local and regional GHG emissions, the degree to which GHG emissions may be avoided under the Ordinance is not the basis for the impact determination. Because the Ordinance would reduce long-term GHG emissions compared to existing emissions associated with oil and gas wells throughout the City, the Ordinance would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Furthermore, as discussed in GHG checklist question (b) below, the Ordinance would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Therefore, this impact is less than significant.

32 Intergovernmental Panel on Climate Change, Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, Fugitive Emissions From Oil and Natural Gas Activities.

33 See **Appendix A** to this Initial Study for further information related to calculations and assumptions utilized to prepare these estimates.

Table 10
Avoided Oil & Gas GHG Emissions

Emissions Source	Metric Tons of Carbon Dioxide Equivalent (per year)[a]
Worker Emissions	142
Fugitive Emissions	9,827
Total Avoided GHG Emissions	**9,969**

[a] *As described previously herein, abandonment of individual wells may occur at any time during the 20-year timeframe, and potentially beyond the 20-year timeframe. It would be speculative to assess how many wells would be abandoned during a given year, month, or peak day. Thus, the total avoided GHG emissions estimated here represents the annual metric tons per year upon abandonment of all wells.*

*Source: Impact Sciences, September 2022. See **Appendix B** to this report.*

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact.

As discussed in detail in the Project's *Air Quality and GHG Technical Report* (see **Appendix A** to this Initial Study), AB 32 required CARB to adopt a scoping plan indicating how reductions in significant GHG sources will be achieved through regulations, market mechanisms, and other actions. In 2008, CARB released the Climate Change Proposed Scoping Plan in October 2008 that contained an outline of the proposed state strategies to achieve the 2020 greenhouse gas emission limits as outlined in AB 32. In response to SB 32, CARB adopted California's 2017 Climate Change Scoping Plan (2017 Update), which outlines the proposed framework of action for achieving California's SB 32 2030 GHG target: a 40 percent reduction in GHG emissions by 2030 relative to 1990 levels.[34] The 2030 target is intended to ensure that California remains on track to achieve the goal set forth by E.O. B-30-15 to reduce statewide GHG emissions by 2050 to 80 percent below 1990 levels.

The Ordinance would be consistent with the objectives of CARB's Scoping Plan, which is intended to reduce GHG emissions in accordance with AB 32 and SB 32. The Scoping Plan provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other strategies to reduce GHGs. Most of these measures focus on area source emissions (e.g., energy production, distribution and usage, and high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels

[34] CARB, *California's 2017 Climate Change Scoping Plan,* November 2017.

(e.g., Low Carbon Fuel Standard), among others. The Ordinance would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law and to the extent that they are applicable to the Ordinance. For example, abandonment activities will utilize equipment in compliance with regulations set forth by CARB. Mobile sources during abandonment would be subject to the requirements of California Assembly Bill 1493 (Pavley Standards), the Advanced Clean Cars Program, and the Low Carbon Fuel Standard Regulation. Additionally, while the Ordinance is not a GHG reduction plan, the Ordinance is a reflection of state, regional, and local goals to move away from reliance on oil and gas energy sources which will serve to reduce long-term GHG emissions and help the State achieve the GHG reductions mandated in AB 32 and SB 32. The State has enacted numerous legislative regulations to address climate change by reducing our dependence on fossil fuels to reduce GHG emissions. California's Renewable Portfolio Standards established by Senate Bill 1078 requires that 60% of our electricity generation be produced from clean renewable sources by 2030 and become carbon-free by 2045. This has contributed to California's move away from electricity powered by coal and natural gas and a progressive increase in the use of solar and wind energy sources. This has occurred for both utility scale energy generation as well as for new single-family residential uses which are required to meet their electricity needs by installing solar panels under the State's Title 24 building standards. For passenger vehicles, Executive Order N-79-20 would ban the sales of new gasoline and diesel passenger vehicles while requiring that only new zero-emission vehicles be sold by 2035. This Executive Order is also consistent with CARB's regulations transitioning from diesel trucks and vans to zero emission trucks, and public bus fleets to be fully electric by 2040. See also Tables 4 and 5 in the Project Description for a comprehensive list of state, regional, and City policies that support the Ordinance. Thus, because the Ordinance is consistent with state, regional, and local goals to move away from reliance on oil and gas energy sources, the Ordinance would not have the potential to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions and this impact is less than significant.

IX. HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☒	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact.

As defined by State law in California Code of Regulations and LAFD CUPA, hazardous wastes are any chemical wastes that are ignitable, toxic, reactive, corrosive, or carcinogen. These wastes may include waste oil, waste coolant, waste parts cleaner, used oil filters and fuel filters, dry cleaning solvents and paints. A waste or combination of wastes, which because of its quantity, concentration, or physical or chemical characteristics may either: 1) cause or significantly contribute to an increase in mortality or an increase in serious irreversible illness; or 2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed of, or otherwise managed. Existing city, county, and state regulations for oil drill sites mitigate or minimize the risk that operation of these well pose in high-risk areas. For example, the LAFD requires that all crude oil facilities submit Hazardous Material Business Plans to identify the extent of the hazardous materials and functions operated on-site. In addition, LAFD also requires a Spill Containment and Control Plan that mitigates spills both on-site and in the adjacent areas around the oil extraction site. CalGEM also conducts regular inspections of the facility to review equipment safety functions and ensure that pipelines are safely maintained. South Coast AQMD also responds to air pollution complaints and has safety standards for specific pieces of equipment that carry the risk of emitting specific odors and that may pose hazards to the workers and local vicinity.

The termination of oil extraction activities would reduce the potential for risk to the public through routine transport, use or disposal of hazardous materials such as petroleum, as extraction would no longer occur citywide. Well abandonment uses materials such as, but

not limited to, cement, bentonite, and various drilling fluids reviewed by the California Department of Conservation's CalGEM division. Therefore, the processing and handling of these materials would be conducted in accordance with the regulatory compliance measures that exist under the jurisdictions of the California Code of Regulations, LAFD CUPA, and CalGEM. Impacts would be less than significant; no mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact.

Methane

Methane (CH_4) is a naturally occurring, odorless, colorless, and extremely flammable gas with a wide distribution in nature. It is the major constituent of natural gas that is used as a fuel and is an important source of hydrogen and a wide variety of other organic compounds. It is often found in conjunction with petroleum deposits. No long-term health effects are known to occur from exposure to methane. However, at very high concentration, methane can act as an asphyxiate by reducing the relative concentration of oxygen in the air that is inhaled (similar to carbon monoxide). The primary danger posed by methane build-up (specifically when within confined spaces) is the risk of fire or explosion.

Methane levels in the local atmosphere are monitored by the CARB and SCAQMD, and are measured in parts per million, or ppm. Normal background is approximately 2 ppm. Results greater than 3 ppm suggest some additional sources of methane, and results greater than 10 ppm suggest a considerable additional amount of methane is present.[35]

The termination of oil extraction activities would reduce the potential for upset and accident conditions associated with oil extraction citywide. Once a well is undergoing abandonment operations, CalGEM would monitor and enforce required methane safety protocols, and CARB and the SCAQMD would measure methane concentrations at the surface around the well. In addition, air measurements would be taken using downwind airplane flights shortly after the well is controlled in order to estimate the leak rate. All of these measurements will indicate whether methane and associated compounds currently are abating due to a successful seal of the well. Some amount of residual methane is expected to seep out of the ground around the leaking well after the well is successfully sealed. In keeping with current policy, the area would continue to be monitored by CARB

35 Air Quality Management District, Continuous Methane Monitoring, website: https://www.aqmd.gov/home/news-events/community-investigations/aliso-canyon-update/air-sampling/air-montoring-activities/continuous-methane-monitoring-data, accessed September 2, 2022.

and SCAQMD to ensure that methane levels remain below the 3 ppm threshold.[36] In the event that methane levels above the acceptable threshold are identified, both CARB and SCAQMD have the jurisdiction to enforce air pollution regulations related to oil drilling and production and methane emissions. Both agencies have the right to conduct inspections of air pollution sources, and the right to issue a Notice to Comply (NC), requiring a facility to quickly correct a minor violation or to provide specified records, or a Notice of Violation (NOV), formally identifying a violation of particular rules or regulations, which may result in civil penalties or, in some cases, referral for criminal prosecution.[37]

Worker exposure to methane is regulated by the OSHA under CFR section 1910.146. This section regulates worker exposure to a 'hazardous atmosphere' within a confined space where the presence of flammable gas vapor or mist is in excess of 10 percent of the lower explosive limit.

Chapter IX, Article 1, Division 71, Section 91.7103 of the LAMC, also known as the Los Angeles Methane Seepage Regulations, identifies Methane Hazard Zones and Methane Buffer Zones. Oil and gas wells may be located within a Methane Hazard Zone, as designated by LADBS. Due to the potential environmental risk associated with Methane Hazard Zones, properties within a Methane Hazard Zone require methane testing and mitigation upon redevelopment. As implementation of the Oil Ordinance would not involve the redevelopment of any of the oil well sites, no action related to methane zones would be necessary.

Future well abandonments that may occur as a result of the Ordinance would be subject to the regulations and standards established by local and state agencies such as CalGEM's statutory oil well abandonment requirements. Compliance with these requirements will ensure risk due to upset or accident conditions involving the release of hazardous materials would be minimized. Additionally, the proposed Ordinance would not allow new development or expansion of oil operations that would otherwise have a potential to create impacts and would reduce the number of operating wells, thereby reducing the potential for future accidents. Therefore, impacts to releasing hazardous materials into the environment would be less than significant, no mitigation is required.

---

36 California Geologic Energy Management Division, Process to Confirm that the Leaking Well is Sealed California Department of Conservation, Division of Oil, Gas and Geothermal Resources, https://www.conservation.ca.gov/index/Documents/DOGGR%20process%20for%20determining%20well%20sealed%20draftl.pdf, accessed September 2, 2022.

37 Air Quality Management District Community Emissions Reduction Plan for Wilmington, Carson, West Long Beach, September 2019, website: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/wilmington/cerp/final-cerp-wcwlb.pdf, accessed September 2, 2022.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact.

Due to the pervasive nature of oil wells in the City, wells are known to operate within ¼-mile of existing schools. The Ordinance provides for the termination of all nonconforming oil uses over a 20-year amortization period. The cessation of oil extraction would result in a decrease in the number of wells operating near school sites, thereby reducing potential risk. Future well abandonments would be subject to the regulations and standards established by local and state agencies such as CalGEM's statutory oil well abandonment requirements. Additionally, the proposed Ordinance would not allow new development or expansion of oil operations that would otherwise have a potential to create impacts.

All potentially hazardous materials transported, stored, or used on individual well sites for abandonment activities would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. All abandonment activities would be required to comply with all federal, state and local standards and regulations. Therefore, the abandonment activities that occur as a result of the Ordinance are not expected to adversely affect existing schools in and around the abandonment sites. Impacts would be less than significant, and no mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than Significant with Mitigation Incorporated.

California Government Code Section 65962.5, commonly referred to as the "Cortese List," requires various State agencies, including but not limited to, the Department of Toxic Substances Control (DTSC) and the SWRCB, to compile lists of hazardous waste disposal facilities, unauthorized releases from underground storage tanks, contaminated drinking water wells and solid waste facilities where there is known migration of hazardous waste and submit such information to the Secretary for Environmental Protection on at least an annual basis.

These lists include, but are not limited to, the 'EnviroStor' (http://www.envirostor.dtsc.ca.gov/public/) and 'GeoTracker' (http://geotracker.waterboards.ca.gov/) lists maintained by the DTSC and the SWRCB, respectively.

As described in the **Project Description**, many of the oil drilling sites are within M3 zones. M3 zones are heavy industrial zones that allow for uses such as cargo container storage, junk yards and scrap metal processing. These uses are commonly contained on the Cortese List. Due to the limited data available regarding the exact location of oil and gas wells within M3 zones, there is overlap between the wells and other properties on the Cortese List. Nonetheless, it is reasonable to assume many of the wells in M3 zones are also on the Cortese List. In addition to wells in the M3 zone, other wells are also believed to be located on the Cortese List.

The Ordinance would require the cessation of oil and gas extraction Citywide, including on any sites that are known to be on the Cortese List. The cessation of oil and gas extraction would not create a significant hazard to the public or the environment and instead would have a beneficial effect of reducing air quality and GHG emissions (See Air Quality, GHG). As described in a) through c) above, all abandonment activities would be completed in accordance with CalGEM and LAFD requirements thereby ensuring no risk to the public would occur. However, due to the high likelihood that soil contamination exists at many of the well sites as a result of their location on the Cortese List, additional mitigation is required. Mitigation Measure HAZ-1 would require prior to abandonment, the well owner to review the Cortese List to determine if the subject well is on the list. If it is found that the subject well (or grouping of wells) is on the list, a Phase I Environmental Site Assessment (ESA) should be conducted to determine the level of contamination. Compliance with recommendations in the Phase I ESA would reduce potential impacts to below a level of significance.

Lastly, it would be speculative to determine any future use that might occur on these sites. At the time when any well sites are considered for redevelopment, including well sites in M3 zones or located on Cortese List, those actions would undergo additional environmental review in accordance with CEQA. With implementation of HAZ-1, impacts are considered less than significant.

MM HAZ-1 For well sites in which the abandonment process requires grading and are:

- Located on or within 500 feet of a Hazardous Materials site listed in any of the following databases:
  - State Water Resources Control Board GeoTracker (refer to https://geotracker.waterboards.ca.gov);
  - DTSC EnviroStor (refer to https://www.envirostor.dtsc.ca.gov/public);
  - DTSC Hazardous Waste Tracking System (refer to https://hwts.dtsc.ca.gov);

- LAFD Certified Unified Program Agency (refer to the active, inactive, and historical inventory lists at https://www.lafd.org/fire-prevention/cupa/public-records);
- Los Angeles County Fire Department Health Hazardous Materials Division (refer to the active and inactive facilities, site mitigation, and California Accidental Release Prevention inventory lists at https://fire.lacounty.gov/public-records-requests);
- SCAQMD Facility Information Detail (refer to https://xappprod.aqmd.gov/find); or

- Located on or within 500 feet of a Hazardous Materials site designated as a Resource Conservation and Recovery Act (RCRA) Small Quantity Generator or Large Quantity Generator (refer to the U.S. EPA Envirofacts database at https://enviro.epa.gov/index.html);

  And:

- The site has not been previously remediated to the satisfaction of the relevant regulatory agency/agencies for any contamination associated with the above uses or site conditions.

Then a Phase I Environmental Site Assessment shall be prepared by a Qualified Environmental Professional in accordance with State standards/guidelines and current professional standards, including the American Society for Testing and Materials' (ASTM) Standard Practice for Environmental Site Assessments, to evaluate whether the site, or the surrounding area, is contaminated with hazardous substances from any past or current land uses, including contamination related to the storage, transport, generation, or disposal of toxic or Hazardous Waste or materials.

If the Phase I identifies a Recognized Environmental Condition (REC) and/or if recommended in the Phase I, a Phase II Environmental Site Assessment shall also be prepared by a Qualified Environmental Professional. The Phase I and/or Phase II Environmental Site Assessment(s) shall be maintained pursuant to appropriate proof of compliance and made available for review and inclusion in the administrative record by the appropriate regulatory agency, such as the State Water Resources Control Board, the State Department of Toxic Substances Control, or the LAFD Hazard Mitigation Program. Any remediation plan recommended in the Phase II Environmental Site Assessment or by the appropriate regulatory agency to ensure the abandonment process does not exacerbate existing identified hazardous conditions shall be implemented and, if required, a No Further Action letter, or equivalent, shall be issued by the appropriate regulatory agency prior to issuance of any permit from LADBS, unless the regulating agency determines that remedial action can be implemented in conjunction with excavation and/or grading. If oversight or approval by a regulatory agency is not required, the Qualified Environmental Professional shall provide written verification of compliance

with and completion of the remediation plan, such that the site meets the applicable standards for the proposed use, which shall be maintained pursuant to appropriate proof of compliance requirements.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less than Significant Impact.

Three airports are located within the City of Los Angeles: two public and one general aviation, respectively they are: Los Angeles International (LAX) and Van Nuys, and Whiteman Airport. There are three inactive plugged wells located within one mile of LAX. However, the Project does not include the construction of any new structures that could interfere with existing flight paths. The Ordinance will not result in a safety hazard for any people residing or working in a project area located within an airport land use plan, within two miles of an airport or in the vicinity of a private airstrip. Noise impacts from abandonment operations would also be less than significant, no mitigation is required – refer to the analysis in Section XIII. NOISE, below.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact.

Emergency services in the City are provided by the LAFD and the City of Los Angeles Police Department (LAPD). Emergency incidents of a larger natural or manmade disaster require coordinated efforts between the LAFD, LAPD and the City's Emergency Operation Center (EOC). The EOC is the focal point for coordination of the City's emergency planning, training, response and recovery efforts. EOC processes follow the National All-Hazards approach to major disasters such as fires, floods, earthquakes, acts of terrorism and large-scale events in the City that require involvement by multiple City departments.

Implementation of the Ordinance would not require or result in permanent modifications to roadways that would impact emergency access. The Ordinance would not result in changes to existing policies, programs, or regulations that address emergency response. Abandonment of oil wells that occurs after cessation of well operation would be reviewed by the LAFD and LAPD to ensure that abandonment operations conform to all applicable regulations (including those applicable to construction related traffic) that address emergency response and access, including the LAFD Fire Code requirements.

While intermittent road closures could occur as a result of abandonment operations, it is not anticipated that such closures would result in substantial delays to service providers. Any lane closures must be approved by LADOT and they would not be approved if substantial delays could result. Typically, LADOT will require a construction traffic management plan, including use of flag personnel to help direct traffic around any roadway closures. Therefore, impacts related to emergency response and access as a result of the Ordinance would be less than significant, no mitigation is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact.

There are currently 21 active wells and 2 idle wells located in the City's designated Very High Fire Hazard Severity Zone. The Ordinance would not result in any new permanent and/or habitable structures in these zones that could exacerbate fire risk. Maintained brush clearance and defensible space requirements are and will continue to be required in accordance with LAFD protocols. Therefore, activities associated with termination and future abandonment would not impact state responsibility areas or lands classified as very high fire hazard severity zones. No impacts regarding wildfire risks or related post-fire conditions would occur.

X. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☐	☒
i. Result in substantial erosion or siltation on- or off-site;				
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
iv. Impede or redirect flood flows?				
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

No Impact.

The purpose of the Ordinance is to terminate existing oil extraction in the City. The termination of extraction activities would have no impact on water or groundwater. Future well abandonment that subsequently may occur would not involve demolition of existing structures, which may instead take place as part of any remediation, which is outside the

scope of this analysis. Internal roads, access ways and storm water retention and other drainage features and facilities shall remain in place. Because no changes would occur regarding water quality standards, waste discharge requirements or otherwise impact surface or ground water quality, implementation of the Ordinance would not have any impacts related to water quality standards, waste discharge requirements or surface or ground water quality. No impact would occur.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact.

Cessation of well operations would not require the use of groundwater, nor would any change in impervious surface occur that could result in interference with groundwater recharge. Well abandonment activities may require water to plug the wells, however, such water usage would be a one-time use and would not be substantial such that it would interfere with groundwater management. As such, these activities would not result in a decrease in groundwater supplies and would not interfere with groundwater recharge. No impact would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. Impede or redirect flood flows?

No Impact.

Cessation of well operations would not alter drainage patterns. Future well abandonment that may occur subsequent to the Ordinance would not involve any changes to, or demolition of existing drainage infrastructure. Internal roads, access ways and storm water retention and other drainage features and facilities shall remain in place. No changes would occur to the course of any existing stream or river, and as previously

discussed, there would be no addition to impervious surfaces. Abandonment operations would not result in the substantial alteration of drainage patterns resulting in erosion or siltation on- or off-site, increase the rate of surface water runoff exceeding the capacity of stormwater and flood management resources or substantial polluted runoff, or impede or redirect flood flows. All existing stormwater retention facilities and other storm water retention and drainage features and facilities will remain in place. No impact would occur.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact.

Cessation of well operations and potential future abandonment of wells would not involve any changes to, or demolition of existing drainage infrastructure. Internal roads, access ways and storm water retention and other drainage features and facilities shall remain in place. While some of the existing wells may be located within in flood hazard, tsunami, or seiche zones, activities related to abandonment would not increase the risk of release of pollutants involving flooding or inundation as all wells would be required to be properly abandoned in accordance with CalGEM requirements. No impact would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact.

As described in X (a) through (d) well cessation that would occur as a result of the Ordinance, and subsequent abandonment of wells would not have an adverse impact on water quality or groundwater. Subsurface activities would involve the plugging of existing and excavated well boreholes with cement, mud and soil. Previously disturbed areas will not involve new excavations or deepening of existing excavations and will not involve the handling or release of hazardous materials. Well plugging under the supervision of CalGEM is designed to protect aquifer zones. All materials removed from the oil well abandonment and abandonment operations area will be disposed of in compliance with all applicable laws and regulatory requirements. No impact would occur.

XI. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

a) Physically divide an established community?

No Impact.

The purpose of the Ordinance is to terminate oil extraction in the City. No new permanent structures would be constructed as part of the Project. As such, the Ordinance would not result in the physical division of an established community.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less than Significant Impact.

The L.A. CEQA Thresholds Guide 2006[38] addresses consistency with plans:

> *For conflicts with environmental goals and policies, consider whether the project would interfere with the City's efforts to meet such goals, or be inconsistent with adopted policies.*

To determine the Project's potential to conflict with adopted policies, the following City plans were reviewed: Conservation Element of the General Plan, West Adams-Baldwin Hills-Leimert Community Plan, Harbor Gateway Community Plan (2022 Draft), Air Quality Element, A Healthy Plan for Los Angeles, Safety Element, L.A.'s Green New Deal,

38 City of Los Angeles, L.A. CEQA Thresholds Guide 2006. Available at: https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/A07.pdf

Wilmington Harbor City Community Plan (2022 Draft). Table 4 in the Project Description provides the relevant policies for each of the plans.

As is shown in the Table, the vast number of these policies recognize the negative health and safety implications of locating oil wells in proximity to residential uses. Further, as can be seen in the table, the City has adopted numerous policies over the last 20 years that encourage either increased management of or termination of oil drilling, including:

- Policy LU75-1 Discretionary Review. Seek a high level of discretionary review for any changes to, or expansion of, existing oil extraction sites and activities so that the public may remain informed and involved, and so that appropriate environmental review may take place pursuant to the California Environmental Quality Act. (West Adams-Baldwin Hills-Leimert Community Plan)

- Policy 2: continue to support state and federal bans on drilling in the Santa Monica Bay and on new drilling along the California coast in order to protect the San Pedro and Santa Monica bays from potential spills associated with drilling, extraction and transport operations. (Conservation Element)

- Coordinate with L.A. County to develop a sunset strategy for oil and gas production operations (L.A. Green New Deal)

- Reduce oil production by 40% below 2013 levels

- 1.2.1 Environmental Justice. In keeping with the Plan for a Healthy LA, build a fair, just and prosperous city where everyone experiences the benefits of a sustainable future by correcting the long running disproportionate impact of environmental burdens faced by low-income families and communities of color. (Safety Element)

- 5.4 Protect communities' health and well-being from exposure to noxious activities (for example, oil and gas extraction) that emit odors, noise, toxic, hazardous, or contaminant substances, materials, vapors, and others. (A Plan for a Healthy Los Angeles)

The Ordinance is consistent and does not conflict with the policies identified in **Table 4**, including the policies set forth above, as it would require the termination of oil and gas extraction in the City. The Ordinance is consistent with current City goals and policies, shown above, that encourage buffers from active wells and call for a transition toward green energy sources such as renewable solar. The Ordinance will help further the goals of the General Plan Health, Wellness and Equity Element, as it seeks to protect community health and wellbeing from exposure to noxious activities, specifically oil and

gas extraction, that emit odors, noise, toxic, hazardous, or contaminant substances, materials, vapor and others.[39]

Cessation of oil and gas extraction activities is consistent with the above polices as it would not interfere with the City's effort to meet such goals and polices and would instead help to further the stated goals and polices. Therefore, the Ordinance does not have the potential to result in any significant impacts due to conflict with existing plans and policies, as no conflict would occur. Impacts would be less than significant, and no mitigation is required.

XII. MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☒	☐

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less than Significant Impact.

The City of Los Angeles General Plan provides growth and development policies by providing a comprehensive long-range view of the City as a whole. The Conservation Element of the General Plan consists of an identification and analysis of the existing natural resources in the City of Los Angeles.

39 Health, Wellness and Equity Element "Plan for a Healthy Los Angeles", page 95 Section 5.4 Noxious activities, available on the City's website at: https://planning.lacity.org/odocument/2442d4df-34b3-4683-8eb9-b5ea1182782b/Plan_for_a_Healthy_Los_Angeles.pdf

Policies of the Safety and Conservation Element include the preservation of mineral resources and of the access to these resources:

- Policy 1: Continue to encourage energy conservation and petroleum product reuse
- Policy 3: Continue to protect neighborhoods from potential accidents and subsidence associated with drilling, extraction, and transport operations, consistent with California Department of Conservation, Division of Oil and Gas requirements

The Health Element includes the following policy related to oil extraction:

- 5.4 Protect communities' health and well-being from exposure to noxious activities (for example, oil and gas extraction) that emit odors, noise, toxic, hazardous, or contaminant substances, materials, vapors, and others. (A Plan for a Healthy Los Angeles)

The Safety Element includes the following policies regarding energy usage:

- 1.2.2 Renewable Energy. Aggressively pursue renewable energy sources, transitioning away from fossil based sources of energy and toward 100% renewable energy sources.
- 1.2.7 Zero Emissions Vehicles. In keeping with the Mobility Plan, work toward zero emissions transportation and goods movement and increase zero emissions infrastructure including charging.

As stated in XI Land Use, numerous other policies have been adopted by the City over the last several years that support limitations such as setbacks on oil wells and encourage a move away from petroleum at the City level. Each of these policies signal a long-term shift away from petroleum to renewables and electricity. As such, while the 2001 Conversation Element provides a map of the various oil fields in the City and discusses petroleum as a resource, the City does not consider petroleum to be a mineral resource of local importance and considers the activities associated with its extraction to be detrimental to public health, safety, and the environment. This is reflected in recent City initiatives and ordinances such as the Green New Deal, Clean Up Green Up (LAMC 13.18 eff. June 2016) and in policies included in the updates to the Health and Safety elements of the City's General Plan adopted on November 24, 2021, including Health Element policy 5.4 and Safety Element policies 1.2.2 and 1.2.7. Furthermore, this Ordinance is consistent with Conservation Element, Section 19 policies 1 and 3 to "encourage conservation of petroleum," and to "protect neighborhoods from potential accidents and subsidence associated with [petroleum] drilling, extraction and transport operations..."

As previously stated, the annual cumulative oil production in 2017 in the City was two percent of the state's total production. This represents a small amount of the available Statewide resource. As State and national policies also shift away from petroleum the value of the resource continues to diminish. Therefore, termination of oil and gas extraction would not represent the loss of a mineral resource that would be of value to the region and the residents of the state. Impacts would be less than significant and no mitigation is required.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less than Significant Impact.

As described under XII(a) above, petroleum is no longer considered an important mineral resource at the local level. This shift is evidenced in the numerous goals and policies adopted by the City over the last 20 years that support a move away from petroleum in favor of renewable energy and electricity (See Tables 4 and 5 in the Project Description). Further, as the health impacts associated with oil and gas extraction have been made clear, the City has moved toward prioritizing the health and safety of residents over oil and gas extraction. In particular, the Ordinance will help further the goals of the General Plan Health, Wellness and Equity Element "Plan for a Healthy Los Angeles" adopted in November 2021 (Health Element), as it seeks to "protect communities'' health and wellbeing from exposure to noxious activities (for example oil and gas extraction) that emit odors, noise, toxic, hazardous, or contaminant substances, materials, vapor and others."[40] The Ordinance represents another example of the City implementing its more current goals and policies that call for a transition away from oil and gas uses. For the reasons stated above, these mineral resources are no longer considered locally important, therefore, impacts would be less than significant and no mitigation is required.

XIII. NOISE

The following is based on the Project's *Noise and Vibration Technical Report* included as **Appendix B** to this Initial Study. The responses to the checklist questions below summarize the Project's potential impacts found therein. For additional details related to noise and vibration setting, regulatory framework, assumptions, methodology, and impact analyses, please refer to **Appendix B** to this Initial Study.

40 Health, Wellness and Equity Element "Plan for a Healthy Los Angeles", page 95 Section 5.4 Noxious activities, available on the City's website at: https://planning.lacity.org/odocument/2442d4df-34b3-4683-8eb9-b5ea1182782b/Plan_for_a_Healthy_Los_Angeles.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant with Mitigation Incorporated.

Short-Term and Temporary Noise

The closure of oil and gas wells entails plugging the wells in place in accordance with California Statutes and Regulations and all other applicable requirements as overseen by CalGEM. The process of well abandonment will be determined on a case-by-case basis under the regulatory supervision of CalGEM and the LAFD and will depend on individual site conditions such as type and depth of well. However, for the purposes of this environmental analysis, several generalized assumptions have been made based upon standard industry practice, existing regulations governing well abandonment, and case studies. While plugging and abandonment varies by well, there is a consistent set of procedures that are followed. Generally, the drill site's existing drilling or maintenance rig

will be used to abandon the well and remove equipment from the well.[41] Well equipment will be removed from the site by truck. Cement trucks will also arrive onsite to fill the well at various depths over a span of several days. An operator may use in excess of 2,500 cubic feet of cement for one abandonment. The process entails removing equipment and filling the well with cement at different phases in order to ensure that it is safe to abandon the well at varying depths. At the end of each work day, the well site is closed and the rig is shut down in order to resume operations the following work day. See the **Project Description** for the anticipated steps of well abandonment.

For purposes of estimating potential noise and vibration levels associated with abandonment activities, it is assumed each well abandonment would last approximately two weeks (i.e., 10 work days), and on-site equipment would include one workover rig, one cement pump truck, one welder, and one tractor/loader/backhoe. This analysis conservatively assumes that all pieces of equipment would operate concurrently, presenting a worst-case impact scenario.

The Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) has compiled data regarding the noise-generating characteristics of specific types of construction equipment and typical construction activities. With the use of the RCNM, as detailed in **Appendix B** to this Initial Study, the short-term and temporary noise levels associated with abandonment activities are presented in **Table 11, Temporary Noise Levels During Well Abandonment - Unmitigated**. As shown in **Table 11**, noise levels were estimated at distances of up to 50 feet, 75 feet and 100 feet to characterize potential noise levels that may be experienced at sensitive receptors located in proximity to oil and gas wells throughout the City. Noise levels would diminish notably with distance from the site at a rate of 6 dB(A) per doubling of distance (noise from stationary or point sources is reduced by about 6 dB(A) for every doubling of distance at acoustically hard locations). For example, a noise level of 86 dB(A) Leq measured at 50 feet from the noise source to the receptor would decline to 80 dB(A) Leq at 100 feet from the source to the receptor and fall by another 6 dB(A) Leq to 74 dB(A) Leq at 200 feet from the source to the receptor. These noise attenuation rates assume a flat and unobstructed distance between the noise generator and the receptor. Intervening structures and vegetation would further attenuate (reduce) the noise. Furthermore, it should be noted that increases in noise levels at sensitive receptors during abandonment would be intermittent and temporary and would not generate continuously high noise levels.

41 When a drilling or maintenance rig is not on the well site, a rig will need to be brought to the site to complete the abandonment process.

Table 11
Temporary Noise Levels During Well Abandonment - Unmitigated

Sensitive Receptor Location	Distance to Well (feet)	Estimated Temporary Noise Levels [dB(A)]	Exceed LAMC Standards?
1. Sensitive Receptors at 50 Feet	50	79	Yes
2. Sensitive Receptors at 75 Feet	75	75	No
3. Sensitive Receptors at 100 Feet	100	73	No

*Source: Impact Sciences, Inc., September 2022. See **Appendix B** to this Initial Study.*

Short-term and temporary impacts would be potentially significant if, as indicated in LAMC Section 112.05, noise from construction equipment within 500 feet of a residential zone exceeds 75 A-weighted decibels (dBA) at a distance of 50 feet from the noise source. Although not required in the LAMC, this analysis also applies this LAMC standard for non-residentially zoned sensitive receptors located in proximity to oil and gas wells throughout the City. It should also be noted that the LAMC noise limitation does not apply where compliance is technically infeasible. Technically infeasible means that the above noise limitation cannot be complied with despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of the equipment. As shown in **Table 11**, the estimated unmitigated temporary noise levels could exceed the 75 dBA noise standard at distances of up to 50 feet from the source, and unmitigated noise levels would not exceed the 75 dBA noise standard at distances of up to 75 feet and 100 feet from the source. As noise levels would diminish with distance from the source, unmitigated noise levels at distances beyond 100 feet from the source would not have the potential to exceed the noise standard. Nevertheless, as the estimated unmitigated temporary noise levels could exceed the 75 dBA noise standard at distances of up to 50 feet from the source, this impact is considered potentially significant.

Mitigation Measures

MM NOI-1: Where well abandonment activities occur within 50 feet of the following sensitive receptors: schools, day cares, elder care facilities, adult residential facilities, parks, hospitals, or residences, flexible sound control curtains shall be erected between the noise-producing equipment and the sensitive receptors, blocking the line-of-sight between the sources and receptors. The sound control curtain materials shall meet a minimum Sound Transmission Class (STC) 20 rating, capable of reducing equipment noise by at least 5 dBA.

Level of Significance after Mitigation

The use of flexible sound control curtains, as required in **Mitigation Measure NOI-1**, would be feasible and effective at reducing short-term and temporary noise levels at sensitive receptors located within 50 feet of well abandonment activities. The STC-20 rating identified in **Mitigation Measure NOI-1** requires the sound control curtain material to have a transmission loss (TL) value of 20 dB. TL is defined as the loss in sound energy, expressed in decibels, as sound passes through a barrier or a wall.[42] According to FHWA Noise Barrier Design Handbook, the design feasibility of a sound barrier that reduces noise by 5 dBA is considered "simple" and a reduction of up to 10 dBA as "attainable."[43] Thus, the data suggests that **Mitigation Measure NOI-1** could reduce noise levels by up to 10 to 20 dBA. However, this analysis conservatively assumes that a 5 dBA reduction would be achieved with the implementation of **Mitigation Measure NOI-1.** As shown in **Table 12, Temporary Noise Levels During Well Abandonment - Mitigated**, **Mitigation Measure NOI-1,** would ensure temporary noise levels would not exceed the LAMC standard of 75 dBA at 50 feet from the source.

Table 12
Temporary Noise Levels During Well Abandonment - Mitigated

Sensitive Receptor Location	Distance to Well (feet)	Estimated Temporary Noise Levels [dB(A)]	Exceed LAMC Standards?
1. Sensitive Receptors at 50 Feet	50	74	No
2. Sensitive Receptors at 75 Feet	75	70	No
3. Sensitive Receptors at 100 Feet	100	68	No

*Source: Impact Sciences, Inc., September 2022. See **Appendix B** to this Initial Study.*

Other noise best practices would be implemented during the abandonment process. These best practices would also help to reduce temporary noise levels in accordance with LAMC Section 112.05. For example, abandonment activities would be scheduled so as to avoid operating several pieces of equipment simultaneously (as feasible), which causes high noise levels. Further, noise and groundborne vibration activities whose specific location on or near the site are flexible (e.g., stationary equipment and truck idling) will be conducted as far as possible from the nearest noise- and vibration-sensitive land uses. However, given the fluid dynamics likely to occur during the abandonment processes, this analysis conservatively does not take any quantified reduction associated

42 FHWA Noise Barrier Design Handbook, Terminology, July 14, 2011.

43 FHWA Noise Barrier Design Handbook, Table 4, July 14, 2011.

with these techniques. Additionally, all abandonment activities that occur as a result of the Ordinance would be conducted in accordance with LAMC Section 41.40, which prohibits construction between the hours of 9:00 p.m. and 7:00 a.m. Monday through Friday, 6:00 p.m. and 8:00 a.m. on Saturday, and at any time on Sunday (i.e., construction is allowed Monday through Friday between 7:00 a.m. to 9:00 p.m.; and Saturdays and National Holidays between 8:00 a.m. to 6:00 p.m.). Thus, all activities generating temporary noise levels would be limited to the less noise-sensitive daytime hours. Based on these reasons, and with the implementation of **Mitigation Measure NOI-1**, the Ordinance would not result in the generation of a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance. As such, temporary noise impacts would be less than significant.

Long-Term Noise

As discussed in the Project's *Noise and Vibration Technical Report* (see **Appendix B** to this Initial Study), existing oil and gas well operations contribute to the ambient noise levels at receptors in proximity to active wells and throughout the City as a whole. The types of noise associated with oil and gas operations can be complex in nature, due to a wide variety of sources. Some of these noises are intermittent, some are continuous, and many vary in their intensity. Certain sources, such as compressor stations, produce low frequency noise (LFN), which is typically heard as a low rumble. There are also numerous source-dependent and subjective factors that may influence health outcomes, such as noise sensitivity and noise reduction technologies employed at specific locations. As shown pin Table 3 of the Project's *Noise and Vibration Technical Report* (see **Appendix B** to this Initial Study), average noise levels from oil and gas production activities range from approximately 58 dBA to 90 dBA, depending on the activity and setback distances. In addition to these noise sources, other existing noise sources associated with well operations throughout the City include operator worker trips (i.e., motor vehicle noise) to and from well locations, and well maintenance related activities (i.e., fire clearance per LAFD and operations maintenance/inspections per CalGEM and other agency requirements). Upon full implementation of the Ordinance, noise sources associated with oil and gas production would be removed within the City, and long-term noise levels would likely be decreased compared to existing noise levels associated with oil and gas production. As such, the Ordinance would not result in the generation of a substantial permanent increase in ambient noise levels in excess of standards established in the

local general plan or noise ordinance, and long-term noise impacts would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact.

Similar to the short-term and temporary noise discussion provided above, activities associated with well abandonment also have the potential to generate short-term and temporary groundborne vibration levels at sensitive receptors located in proximity to the wells. Based on the parameters described previously and guidance from the FTA's *Transit Noise and Vibration Impact Assessment Manual,*[44] groundborne vibration levels associated with abandonment activities are presented in **Table 13, Temporary Vibration Levels During Well Abandonment.** As shown in **Table 13**, groundborne vibration levels were estimated at distances of up to 50 feet, 75 feet and 100 feet to characterize potential vibration levels that may be experienced at sensitive receptors located in proximity to oil and gas wells throughout the City. **Table 13** illustrates that short-term and temporary vibration levels would not have the potential to exceed Caltrans' standards for building damage (PPV) or the FTA's standards for human annoyance (VdB). As such, the Ordinance would not result in the generation of excessive groundborne vibration levels, and these impacts would be less than significant.

Table 13
Temporary Vibration Levels During Well Abandonment

Sensitive Receptor Location	Distance to Well (feet)	Vibration Standards PPV/VdB[a]	Estimated Vibration Levels PPV/VdB
1. Sensitive Receptors at 50 Feet	50	0.25/80	0.03/78
2. Sensitive Receptors at 75 Feet	75	0.25/80	0.02/73
3. Sensitive Receptors at 100 Feet	100	0.25/80	0.01/69

[a] *The vibration standards applied are based on the FTA and Caltrans standards provided previously in **Table 5** and **Table 6** herein.*
*Source: Impact Sciences, Inc., September 2022. See **Appendix B** to this Initial Study.*

44 Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. Available at: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. See **Appendix B** to this report for vibration calculations.

c) For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact.

Three airports are located within the City of Los Angeles: two public and one general aviation. Respectively, they are: Los Angeles International (LAX) and Van Nuys, and Whiteman Airport. There are three inactive plugged wells located within one mile of LAX. As these wells are plugged (i.e., no oil and gas extraction occurring), there would be no changes to the existing conditions at these locations. Thus, the Ordinance would not expose people residing or working in the area of oil wells to excessive noise levels associated with a private airstrip or public use airport. No impact would occur.

XIV. POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact.

The purpose of the Ordinance is to terminate oil extraction in the City. No new permanent structures would be constructed as part of the Project. The Ordinance does not regulate redevelopment of any well sites, as such analysis of future land uses that may induce population growth would be speculative at this time. As such, the Ordinance would not

result in unplanned population growth either directly (by proposing new homes or businesses) or indirectly (through new infrastructure).

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact.

The Ordinance pertains to the termination of oil and gas drilling uses citywide and would not involve changes to any existing residential land uses. It would not displace any residents, remove existing housing, or necessitate the construction of replacement housing elsewhere. Therefore, no impacts would occur.

XV. PUBLIC SERVICES

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Fire protection?	☐	☐	☒	☐
b. Police protection?	☐	☐	☒	☐
c. Schools?	☐	☐	☒	☐
d. Parks?	☐	☐	☒	☐
e. Other public facilities?	☐	☐	☒	☐

a) Fire protection?

b) Police protection?

c) Schools?

d) Parks?

e) Libraries?

Less than Significant Impact.

The Ordinance pertains to the termination of oil and gas drilling uses citywide and would not involve changes to any existing land uses or the construction of any residential or commercial uses which might generate needs for additional public services. The Project will not result in substantial adverse impacts related to the provision of public services, including fire, police, schools, parks or other public facilities and would not require the construction or physical alteration of any government facility providing public services. The Ordinance does not change the existing City zoning or General Plan designations for the well sites and, therefore, changes to land uses or population densities that determine the demand for public services would remain unchanged.

LAFD oversees some well maintenance and well abandonment activities, and as such, there will be a need for inspections at sites as wells are abandoned. However, LAFD is currently performing this work and the cessation of oil drilling would not place additional demand on the LAFD as well abandonment would occur incrementally over the 20 year (or more) amortization period. Further, as wells are abandoned and the number of active well sites decreases, demand on LAFD personnel would be reduced. Impacts related to public services including police and fire protection, schools, parks or libraries would be less than significant, no mitigation is required.

XVI. RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact.

The Ordinance pertains to the termination of oil and gas drilling uses citywide and would not involve changes to any existing residential land uses. It would not displace any residents, remove existing housing, or necessitate the construction of replacement housing elsewhere. The Ordinance does not change the existing City zoning or General Plan designations for the well sites and, therefore, changes to land uses or population densities that determine the demand for recreational facilities would remain unchanged. The Ordinance does not regulate redevelopment of any well sites, as such analysis of future land uses that may increase demand on recreational facilities would be speculative at this time. No impact would occur.

XVII. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d. Result in inadequate emergency access?	☐	☐	☒	☐

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact.

In general, transportation policies or standards adopted to protect the environment are those that support multi-modal transportation options and a reduction in VMT. Conversely, a project would not be shown to result in an impact merely based on whether a project would not implement a particular program, plan, policy, or ordinance. Many of these programs must be implemented by the City itself over time, and over a broad area, and it is the intention of this threshold test to ensure that proposed development projects and plans do not preclude the City from implementing adopted programs, plans and policies. The Ordinance would not conflict with the City's Mobility Plan as no new permanent roadways or road modifications would be constructed as a result of the cessation of oil extraction. No impact would occur.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

No Impact.

The State of California Governor's Office of Planning and Research (OPR) issued proposed updates to the *CEQA Guidelines* in November 2017 and an accompanying technical advisory guidance finalized in December 2018 (OPR Technical Advisory) that amends the Appendix G threshold for significance for transportation impacts to delete reference to vehicle delay and level of service and instead refer to Section 15064.3, subdivision (b)(1) of the *CEQA Guidelines* asking if the project will result in a substantial increase in vehicle miles traveled (VMT). The California Natural Resources Agency certified and adopted the *CEQA Guidelines* (Public Resources Code 21000–21189) in December of 2018 and are now in effect. Accordingly, the City of Los Angeles has adopted significance criteria for transportation impacts based on VMT for land use projects and plans in accordance with the amended Appendix G threshold for significance. The City of Los Angeles has developed specific thresholds for land use projects and plans, neither of which are applicable to this ordinance.

The Ordinance would not generate new trips. For existing and idle wells, some minimal trips occur to conduct operation and maintenance activities. Once well operations cease, these trips would be reduced or completely eliminated. During the abandonment phase, trips would be generated as workers access the sites to complete the abandonment, however, once this phase is complete, these trips would cease as well. As the Ordinance would not generate net new trips, no impact would occur related to increases in VMT.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact.

The Ordinance would not modify existing roadways or intersections, as such there would be no hazards due to design features or increased conflicts between incompatible uses that would occur as a result of the Ordinance. The Ordinance would not result in changes being made to the local roadways or impede public access on any public right-of-way. As such, the Project would not increase hazards due to a geometric design feature and no impact would occur.

d) Result in inadequate emergency access?

Less than Significant Impact.

The City has designated disaster routes through the Safety Element of the City General Plan. Implementation of the Ordinance would not hinder emergency access or evacuation routes. No changes to emergency routes would occur as part of the Project. While intermittent road closures could occur as a result of abandonment operations, it is not anticipated that such closures would result in substantial delays to service providers. Any lane closures must be approved by LADOT and they would not be approved if substantial delays could result. Typically, LADOT will require a construction traffic management plan, including use of flag personnel to help direct traffic around any roadway closures. Therefore, impacts related to emergency response and access as a result of the Ordinance would be less than significant, no mitigation is required.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k)?

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in

subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Less than Significant Impact.

The Ordinance provides for the termination of all nonconforming oil uses over a 20-year amortization period. The Ordinance only affects the use of sites for existing oil and gas extraction activities. Most tribal cultural resources are anticipated with buried resources and land valued for association with tribal practices. The Ordinance will not result in excavation of soils or ground disturbance on undisturbed land. Therefore, impacts are anticipated to be less than significant.

Assembly Bill 52 (AB 52) established a formal consultation process for California Native American Tribes to identify potential significant impacts to Tribal Cultural Resources, as defined in Public Resources Code §21074, as part of CEQA. As specified in AB 52, lead agencies must provide notice inviting consultation to California Native American tribes that are traditionally and culturally affiliated with the geographic area of a proposed ordinance if the Tribe has submitted a request in writing to be notified of proposed ordinances. The Tribe must respond in writing within 30 days of the City's AB 52 notice. In accordance with AB 52, on August 16, 2022, notice of the Ordinance has been provided to tribes who have requested such notice in the City of Los Angeles. As of the date of the publication of this document, the Gabrieleno Band of Mission Indians – Kizh Nation, and the Fernandeño Tataviam Band of Mission Indians have requested consultation. Consultation with the Gabrieleno Band of Mission Indians – Kizh Nation is ongoing, while consultation with the Fernandeño Tataviam Band of Mission Indians closed on September 2, 2022.

XIX. UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact.

Wastewater generated in the City is primarily treated at the Hyperion Treatment Plant in Playa del Rey. Wastewater reclamation plants that comprise the Hyperion Service Area have a total design capacity of 580 million gallons of wastewater per day (MGD). The RWQCB regulates the treatment of wastewater at treatment plants and the discharge of the treated wastewater into receiving waters. The Hyperion Treatment Plant is responsible for adhering to RWQCB regulations as they apply to wastewater generated in the City. LADWP is the primary provider of water and electric services for the City of Los Angeles, servicing more than four million customers.

Implementation of the Ordinance would not increase demand for water, wastewater, electrical power, natural gas, or telecommunication facilities. Nor would the Ordinance increase storm water runoff. The Ordinance does not affect natural gas managed by a

public utility. As stated in **Mineral Resources**, the City is moving away from petroleum and has implemented numerous goals and policies that support this shift. Further, as stated in **Greenhouse Gases**, the State is also mandating a shift from petroleum. Due to the small amount of oil that is extracted within the City (approximately two percent of the State total) and due to the incremental nature of the ordinance, no new or expanded facilities would be necessary. No impact would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact.

The Ordinance would not create new demand for water supplies as no reasonably foreseeable future development would occur as a result of the Ordinance. No impact would occur.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact.

The Ordinance would not create new demand for wastewater treatment as no reasonably foreseeable future development would occur was a result of the Ordinance. No impact would occur.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact.

The Ordinance would not generate solid waste in excess of state or local standards as no reasonably foreseeable future development would occur was a result of the Ordinance. No impact would occur.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact.

All abandonment activities that would occur as a result of the Ordinance would be conducted in compliance with local and state regulations. While is it unlikely that any significant solid waste would be generated as a result of the Ordinance, all disposals would occur in accordance with local and state regulations. No impact would occur.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact.

The City has designated disaster routes through the Safety Element of the City General Plan. Implementation of the Ordinance would not hinder emergency access or evacuation routes. No changes to emergency routes would occur as part of the project. While intermittent road closures could occur as a result of abandonment operations, it is not anticipated that such closures would result in substantial delays to service providers. Any lane closures must be approved by LADOT and they would not be approved if substantial

delays could result. Typically, LADOT will require a construction traffic management plan, including use of flag personnel to help direct traffic around any roadway closures. Therefore, impacts related to emergency response and access as a result of the Ordinance would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact.

The Ordinance does not include the construction or maintenance of any structures that would pose a fire risk. There are currently 21 active wells and 2 idle wells located in the City's designated Very High Fire Hazard Severity Zone. As described throughout this document, any well abandonment activities would occur in accordance with local and state regulations to ensure proper protocols are followed. With compliance with existing regulations governing well abandonment, no impact would occur.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact.

The Project is an ordinance and does not require the installation of any infrastructure that could exacerbate fire risks. As described throughout this document, any well abandonment activities would occur in accordance with local and State regulations to ensure proper protocols are followed. Well abandonment activities are anticipated to use existing infrastructure on site to complete the abandonment process with limited trucks access the wells to plug the wells. With compliance with existing regulations governing well abandonment, no impact would occur.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact.

The Ordinance does not include any structures that would be susceptible to fire or those that would increase fire risk. As a result, there would be no risk of downslope or downstream flooding or landslides. As described throughout this document, any well abandonment activities would occur in accordance with local and state regulations to

ensure proper protocols are followed. With compliance with existing regulations governing well abandonment, no impact would occur.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact.

For the reasons stated in this Initial Study, the Ordinance would not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of major periods of California history or prehistory. Neither the implementation of the Ordinance nor the oil well abandonment process will involve the disturbance of previously undisturbed land. As discussed in this Initial Study, potential impacts related to biological, archaeological, paleontological, and tribal cultural resources would be less than significant. No further analysis is required.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact.

For the reasons stated in this Initial Study, implementation of the Ordinance would not result in any potentially significant impacts and would not have the potential to contribute to significant cumulative impacts. The impacts associated with individual well abandonments have been found to be less than significant. Abandonment activities associated with the citywide phase out of oil and gas drilling are anticipated to be amortized across a 20-year period such that the combined impacts of well cessation and abandonment across the City will not be cumulatively considerable. Impacts would be less than significant and no further analysis is required.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact.

As identified throughout the analysis, the Ordinance would not have an environmental effect that would cause substantial adverse effects on human beings directly or indirectly. Impacts would be less than significant.

5 CONCLUSION

Based upon the information set forth above, and the substantial evidence contained in the whole of the record of proceedings, the City has determined that with the implementation of the feasible mitigation measures set forth in this Initial Study the

adoption of this Ordinance will not have a significant effect on the environment and a Mitigated Negative Declaration may be adopted.