
OIL AND GAS DRILLING ORDINANCE

TOPICAL RESPONSES TO COMMENTS

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.

An Initial Study (IS), Mitigated Negative Declaration (MND) and corresponding Mitigation Monitoring Program (MMP) were prepared for the proposed Project in accordance with the California Environmental Quality Act (CEQA). The circulation period for public review and comment on the IS/MND was from September 15, 2022 to October 17, 2022. On October 13, 2022, an Oil and Gas Drilling Ordinance Responses to Comments document was transmitted to Council File No. 17-0447-S2 responding to the following comments received from September 15, 2022 to October 11, 2022:

Comment No.	Comment Date	Commenter
1	9/20/2022	Alston & Bird
2	9/21/2022	Western States Petroleum Association
3	9/19/2022	Michael Salman
4	9/21/2022	Michael Salman
5	9/21/2022	Michael Salman
6	9/21/2022	Michael Salman
7	9/19/2022	Warren Resources

On October 27, 2022, a supplemental Oil and Gas Drilling Ordinance Responses to Comments document was transmitted to Council File No. 17-0447-S2 responding to the following comments received from October 12, 2022 to October 17, 2022 (the end of the comment period), as well as responding to the September 21, 2022 Manatt, Phelps & Phillips, LLP letter and the September 27, 2022 Wayne Freeman letter:

Comment No.	Comment Date	Commenter
8	10/17/2022	Manatt, Phelps & Phillips, LLP
9	10/17/2022	Alston & Bird
10	Dated 9/21/2022 Submitted 10/17/2022	Michael Salman
11	9/21/2022	Manatt, Phelps & Phillips, LLP
12	10/17/2022	Day Carter & Murphy LLP
13	9/27/2022	Wayne Freeman
14	10/15/2022	Kenneth Parker

None of the comments received during the entirety of the Initial Study/Mitigated Negative Declaration (IS/MND) circulation period offers any new evidence or any evidence that any fact, analysis, or determination in the IS/MND is incorrect. None of the comments make a fair argument, supported by substantial evidence, that the Ordinance may cause a significant impact on the environment.

In reviewing the comments, several comments raised similar and/or related issues. To address these comments, the City of Los Angeles, as lead agency, prepared Topical Responses to address the following topics comprehensively:

- Topical Response 1: Processing, Applicability, and Adequacy of the Draft IS/MND
- Topical Response 2: Piecemealing
- Topical Response 3: Air Quality
- Topical Response 4: Greenhouse Gas (GHG) Emissions
- Topical Response 5: Health Risks
- Topical Response 6: Noise

The Topical Responses do not alter the analysis or conclusions of the IS/MND and do not involve any new significant impacts or add “significant new information” that would require recirculation of the IS/MND pursuant to CEQA Guidelines § 15073.5. The Topical Responses are intended to provide the decision makers with clarifications regarding the issues raised by the commenters.

Topical Response 1: Processing, Applicability, and Adequacy of the IS/MND

Certain comments expressed concern regarding the lead agency’s source documents, the processing and applicability of the IS/MND. The IS/MND was supplemented by technical reports prepared by technical consultants and experts, Impact Sciences. For the purposes of conducting environmental analysis of the proposed Ordinance and preparing an IS/MND, several generalized assumptions were made based upon standard industry practice, existing regulations governing well abandonment, and case studies. The project description on page 30 of the IS/MND and page 4 of Appendix A - Air Quality and Greenhouse Gas Emissions Technical Report (“Appendix A”) and Appendix B - Noise and Vibration Technical Report (“Appendix B”), describe the following assumptions: “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.¹ 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

¹ 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.

shut down in order to resume operations the following work day.” Additionally, the project description on page 30 of the IS/MND and page 4 of Appendix A and Appendix B lists the anticipated steps of well abandonment. These assumptions were based on 1) consultations with the California Geologic Energy Management Division (CalGEM). CalGEM has overseen the abandonment of at least 1,400 oil wells and is therefore an expert on the process; 2) publicly available information including CEQA documentation for the Culver City Oil Ordinance. The lead agency’s methodology is based upon the fact that well abandonment activities will comply with existing federal, state, and local laws, ordinances, and regulations. The IS/MND does not analyze a specified timeline for the abandonment of all wells in the City, as operators could continue to operate through the 20-year amortization period that is currently in the Los Angeles Municipal Code.

The IS/MND was published and made available for public review and comment on September 15, 2022. In accordance with CEQA Guidelines Section 15073, the IS/MND had a 30-day public review and comment period ending on October 17, 2022. The City Planning Commission, along with City Council’s Energy, Climate Change, Environmental Justice, and River, and Planning and Land Use Management Committees recommended adoption of the environmental clearance, the IS/MND, and environmental findings on September 22, 2022, October 6, 2022, and November 1, 2022, respectively. The CEQA Guidelines Section 15025(c) provides advisory bodies such as the City Planning Commission and Council Committees the ability to make a recommendation on a project, and a proposed IS/MND, in draft or final form. Therefore, the actions of these advisory bodies relating to the project’s environmental clearance were conducted in accordance with CEQA.

Per Title 14 of the California Code of Regulations, Section 15074, the lead agency must consider the comments it receives during the review period prior to adopting the IS/MND. The lead agency transmitted responses to comments regarding the IS/MND that have been received up until October 17, 2022 as well as prepared Errata No. 1 (dated October 2022) and Errata No. 2 (dated November 28, 2022) to the IS/MND that provide minor updates to factual information related to the existing environmental setting in the IS/MND and that adds a proposed mitigation measure only as an additional protection of the public health. The minor updates reflected in Errata No. 1 and No. 2 clarify, amplify, or make minor modifications to the information already presented. None of the updates presented in either Errata modify the analysis or conclusions of the document; no recirculation was required as there were no new impacts or new mitigation measures identified to avoid a significant environmental impact.

Certain comments question the information and conclusions in the IS/MND. CEQA Guidelines Section 15064 incorporates statutory provisions, which define “substantial

evidence.” Specifically, subsection (g), Public Resources Code section 21082.2 provides that the determination of significance shall be based upon substantial evidence in light of the whole record before the agency. This may include materials that are not part of the environmental document, but that are known to and have been considered by the agency. Public Resources Code section 21082.2 states that: "argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly inaccurate or erroneous, or evidence of social or economic impacts which do not contribute to, or are not caused by, physical impacts on the environment, is not substantial evidence." Substantial evidence is defined to include “facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.” No comments were submitted on the IS/MND constituting substantial evidence to support a fair argument that the Project will result in significant environmental impacts.

Topical Response 2: Piecemealing

Comments state that the City has impermissibly piecemealed its environmental review related to the proposed Ordinance. The claim is based upon (1) statements in staff reports that the Ordinance is the “first step” in safely phasing out oil operations in the City; (2) the City Council instruction for the Office of Petroleum and Natural Gas Administration and Safety (OPNGAS) to hire a consultant to prepare an oil well extraction amortization study and to prepare a policy for the abandonment of oil wells and the remediation of well sites; (3) staff’s representation that the Zoning Administrator will prepare a Zoning Administrator’s Interpretation (ZAI) regarding what constitutes “maintenance.” Some of the comments argue that the City should have included in the IS/MND analysis of the potential environmental impacts of an amortization study that hasn’t commenced, a policy related to abandonment and site remediation for which drafting has not started and the definition of “maintenance.” For the reasons set forth below these comments lack merit.

Based on the City’s review of the appropriate legal standards and evidence in the record, the City finds that it has not impermissibly “piecemealed” or “segmented” the project for purposes of adequate environmental review of the proposed Ordinance.

The fact that City staff has stated that, from a policy perspective, the proposed Ordinance is the first step in updating the City’s regulations and ordinances addressing oil and gas extraction to safely phase out oil operations in the City does not mean these other initiatives are a reasonably foreseeable consequence of the adoption of this Ordinance. There is no piecemealing when projects have different proponents, serving different

purposes, or can be implemented independently.² In addition, piecemeal review does not occur when a project is structurally, legally, and financially independent from other projects. With regard to this Ordinance, pursuant to the City Council motion directing its preparation, this Ordinance has a very specific two-part purpose: (1) To prohibit new oil and gas drilling and extraction in the City and (2) make existing oil and gas extraction operations a nonconforming use under the City's zoning code. The purpose of this Ordinance is, therefore, different from the purpose of the yet to be prepared amortization study or the yet to be drafted policy related to well abandonment and well site remediation. The purpose of the future amortization study is to determine whether the 20 year amortization period currently set forth in the Los Angeles Municipal Code could be modified for non-conforming oil extraction activities in the City and the purpose of the policy on well abandonment and site remediation is to potentially establish additional local procedures and requirements for well abandonment and site remediation activities. As expressly stated in the IS/MND, the Ordinance does not modify the amortization period for nonconforming uses of 20 years that has been in the City's zoning code since approximately 1952. It does not regulate the abandonment of oil wells except to mitigate reasonably foreseeable noise impacts associated with well abandonment within 50 feet of sensitive uses and to provide further reductions in certain criteria pollutants **beyond** what is required to ensure air quality impacts are less than significant. Finally, the Ordinance does not provide any regulations related to the remediation of well sites. Furthermore, this ordinance is fully capable of being implemented regardless of whether an amortization study is prepared or a new policy regulating well site remediation is issued.

Furthermore, the proposed Ordinance remains a standalone project under CEQA that has independent utility and does not require either the amortization study or the policy regarding well abandonment and site remediation to proceed. In fact, the Ordinance, in and of itself, fulfills important state and local goals, such as protecting communities from fossil fuel pollution, achieving net-zero greenhouse gas emissions by 2045, and helping offset the health impacts associated with living in close proximity to oil wells.

At this time, it would be entirely speculative to opine on the potential contents or results of the amortization study - as it has not yet commenced. Since, under the proposed Ordinance, existing well operators will be able to continue oil extraction for another 20 years, analyzing potential environmental impacts associated with remediation of well sites at this time would be speculative. As such, the analysis of the foreseeable impacts associated with a possible different amortization period or yet to be developed regulations

² *Aptos Council v. County of Santa Cruz* (2017) 10 Cal.App.5th 266, 279-280; see also *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1223.

and policies would be meaningless. In addition, there are current state regulations related to well abandonment and the remediation and development of sites that may contain hazardous materials or an oil well. These regulations would continue to apply to well abandonment and potential remediation activities with or without the approval of the Ordinance.

Finally, while commenters suggest the City develop a definition for “maintenance” within the Ordinance, commenters failed to explain how the development of a definition of “maintenance” to be applied to the Ordinance implicates potential environmental impacts. This definition is in the context of identifying what maintenance activities will be allowed to address potential threats to public, health, safety, and the environment. As such, the definition will only assist in ensuring that the continued operation of the oil wells will not heighten or exacerbate threats to public health, safety, and the environment.

Topical Response 3: Air Quality

This Topical Response is in response to comments that assert the IS/MND’s air quality analysis is flawed due to a misstatement of the emissions related to equipment used for abandonment of wells and due to a lack of any analysis of the health-related impacts associated with the equipment used for abandonment. These comments primarily reference wells operated by Warren Resources as stated with the letter from Day, Carter, and Murphy LLP. The commenter provided an Air Study prepared by Yorke Engineering, Inc. (“Yorke”). The comments assert that emissions related to abandonment would be higher than those disclosed in the IS/MND and health risks associated with diesel particulate matter during abandonment would exceed cancer and non-cancer health risk thresholds established by the SCAQMD. Neither of these assertions are supported with substantial evidence, and thus, the comment does not present a fair argument that the Project may have a significant effect on the environment. As stated in Section 15384(a) of the State CEQA Guidelines, “substantial evidence” as used in these guidelines means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social or economic impacts which do not contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence. Section 15384(b) of the State CEQA Guidelines further states substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. As discussed

in the memorandum dated November 23, 2022 from Impact Sciences Inc., and summarized below, the assertions contained in the comments and the supporting Yorke study are not predicated on facts, do not contain reasonable assumptions predicated on facts, and consist of speculation and evidence that is clearly erroneous and inaccurate.

Emissions During Abandonment

A particular comment asserts that the IS/MND does not disclose the specifications for the equipment used for analyzing abandonment emissions. This assertion is false. Pages 3 through 5, page 41, and the appendices of the Air Quality and Greenhouse Gas (GHG) Technical Report (included as Appendix A to the IS/MND) provide a detailed description of the assumptions for the abandonment process including anticipated duration, equipment, worker trips, and truck trips that may be necessary for abandonment. The equipment type, fuel type, engine tier, hours per day, horsepower and load factor were disclosed in Appendix B to the Air Quality and GHG Technical Report. The abandonment process and assumptions for abandonment were formulated by the City through the review of previous CEQA documentation that analyzes the termination of nonconforming oil and gas uses and via consultations with agencies with expert knowledge in abandonment of oil wells in California, including staff at CalGEM. According to CalGEM's webpage regarding their Idle Well Program, CalGEM has overseen the plugging and abandonment of about 1,400 wells since 1977³ and is therefore an expert in determining the appropriate assumptions. Further, the IS/MND recognizes that each well presents unique circumstances and the assumptions provided represent the City's best effort at determining what might occur at any particular site. These assumptions are based on expert opinion and the City's knowledge about the type and location of these wells which may include Warren's wells as well as others. Many of the assumptions used in the IS/MND, including anticipated equipment for abandonment, are also consistent with the CEQA document prepared by the City of Culver City and their experts in analyzing an ordinance to terminate nonconforming oil and gas uses. These sources are directly relevant to the Ordinance as they relate to abandonment of oil wells.

Further, comments assert the IS/MND should have used a different power rating for the workover rig and asserts a mud pump engine would also be required for abandonment under the Ordinance. As detailed in Appendix A to the IS/MND, the Air Quality and GHG Technical Report calculated the potential abandonment emissions with the use of the California Emissions Estimator Model (CalEEMod). Because this is the air quality model recommended by the SCAQMD for CEQA analyses, the IS/MND appropriately relied on

³ California Department of Conservation. California Geologic Energy Management Division (CalGEM). "Idle Well Program." https://www.conservation.ca.gov/calgem/idle_well. Assessed 16 November 2022.

CalEEMod to apply assumptions related to equipment type, fuel type, engine tier, hours per day, horsepower and load factor. The CalEEMod User Guide states CalEEMod calculates the exhaust emissions based on the CARB OFFROAD2017 methodology. As stated above, the anticipated equipment list of the abandonment of wells was developed by reviewing the equipment list provided in CEQA documents prepared by Culver City analyzing potential impacts from well abandonment and in the administrative record for the Jefferson Oil Drill Site in Los Angeles, which recently was abandoned in accordance with CalGEM regulations (City of LA Case No. ZA-1965-17528-PA5).

The commenter's basis for assertions regarding equipment type and power ratings that should have been used to calculate well abandonment emissions is a Final Environmental Impact Report (EIR) prepared by the SCAQMD for the Breitburn Santa Fe Springs Blocks 400/700 Upgrade Project. However, upon review of the Final EIR cited in the comment, the project analyzed therein was related to a facility upgrade to increase production at an existing oil and gas facility. The analysis contained therein did not address abandonment of wells nor discuss the necessary equipment for abandonment of wells. The commenter cites Table B-16 of that Final EIR as the basis for their opinion on what the IS/MND should have included for abandonment activities, yet Table B-16 describes drilling emissions associated with the proposed upgrade. Thus, because these conditions do not reflect the characteristics of well abandonment, the assertion regarding equipment is not based on relevant information and is not considered a reasonable assumption predicated on fact. The comment offers no additional evidence supporting their claims on the equipment that will be needed for abandonment activities. In addition, Yorke's revised emissions calculations (see Yorke Attachment 2) do not disclose which emission factors were used or how the emissions were calculated. Without any documentation supporting how the emissions were calculated, Yorke's revised emissions calculations cannot be reviewed and are not substantiated. Further compounding the commenter's unsubstantiated claims, Yorke speculates that all of the purported missing equipment would be used in addition to the equipment already included in the IS/MND. The comment provides no credible evidence for this assumption and does not substantiate what equipment and intensities will be required for well abandonment. Thus, the comment is not supported by facts and the speculation results in a significant overestimation of emissions claimed by the commenter. Notwithstanding the comment's use of irrelevant information, unreasonable assumptions unsupported by fact, and speculation resulting in a significant overestimation of emissions, the commenter agrees with the IS/MND conclusion that per-well abandonment would not exceed the regional or localized thresholds of significance established by the SCAQMD.

Related comments, and Yorke’s supporting study that was submitted to the record, also misstate the characteristics of abandonment activities contemplated under the Ordinance. In multiple locations, the comment speculates that well abandonment will likely be compressed in time either because operators seek to produce up to the end of the 20-year period or because the amortization period will be shortened by the City following its study. This comment is pure speculation as the City’s amortization study has not yet commenced and will likely take several years to complete. Therefore, there is no way to accurately determine the amortization periods recommended by this future amortization study. Yorke’s study also incorrectly states that the Ordinance includes an intensive and accelerated abandonment program, proposes a mandated abandonment program, and includes an amortization period that dictates the timing of when wells must be abandoned. These characterizations do not reflect the project description of the Ordinance. Page 29 of the IS/MND clearly states 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. Page 29 of the IS/MND further states abandonment of individual wells may occur at any time during the 20-year timeframe, and potentially beyond the 20-year timeframe. Therefore, all comments related to the timing of abandonment and potential impacts associated with a purported intensive and accelerated abandonment program are speculative and not supported by facts.

Topical Response 4: Greenhouse Gas Emissions

Comments indicating that the IS/MND’s GHG analysis is inadequate because it understates emissions from abandonment and fails to analyze indirect GHG impacts are incorrect. With respect to the purported understated emissions from abandonment, please refer to **Topical Response 3**. As stated therein, the Yorke study referenced in the comment is not supported by substantial evidence and does not support a fair argument that emissions were underestimated in the IS/MND.

Further, one comment states the IS/MND fails to discuss indirect impacts related to the use of the properties after the oil production operations have ceased. The comment references the Yorke study which analyzed a hypothetical future use of the well sites, including a fast-food restaurant with drive-thru among other uses. As stated on page 32 of the IS/MND:

“...it would be speculative to contemplate...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 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... future development. Those impacts would be analyzed in subsequent environmental analyses at either the programmatic or project level.”

The comment also states the GHG analysis is inadequate due to an apparent assumption that a decrease in the production of oil will also result in a decrease in the consumption of gasoline. The comment further speculates that a similar amount of oil will be trucked in from other sources or imported through the nearby port facilities, likely originating from overseas where GHG regulations are not as strict. The supply chain as it relates to oil production is complex and varies based on global supply and demand and commodities markets which is well beyond the scope of this project. In general, oil is transported by pipeline, ship, truck, and rail to refineries (both in and out of state). Once refined, fuels are moved through a system of pipelines and bulk storage terminals to destinations throughout Southern California, Las Vegas, Nevada, and Phoenix, Arizona. Gasoline is then distributed, largely by truck, to independent and/or sellers affiliated with large oil companies who then sell that gasoline to the consumer.⁴ For the City to make any reasonable assumptions about the global supply chain as it relates to petroleum would be speculative. The commenter does not provide any facts to support its claim that there is a connection between the Ordinance and available supply of gasoline in Los Angeles County. Rather, it relies on vague statements on the source of oil.

The Ordinance has no direct effect on the demand for gasoline. To the contrary, 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. On or about November 16, 2022 the California Air Resources Board (CARB) released its 2022 Scoping Plan for Achieving Carbon Neutrality (Scoping Plan), attached in its entirety to this document for reference. It provides additional evidence regarding the historic annual decreases in oil extraction within the state and anticipates the number of barrels of oil to be extracted in the state will decrease to less than half the production rate in 2020. Specifically, the Scoping Plan references California Energy Commission data that shows the total oil extracted in California peaked in 1986 at 402 million barrels. Since then, California’s crude oil production has decreased at an average rate of 6 million barrels per year, reaching a production level of 200 million barrels in 2020. The Scoping Plan then references a UC Santa Barbara report estimated that under business as usual conditions, the annual production rate will drop to 97 million barrels in 2045. This does not account

⁴ Western States Petroleum Association, Contributions of the Oil and Gas Industry to Los Angeles County. June 2020.

for the recent regulatory efforts to phase out internal combustion engine vehicles in favor of zero emission vehicles in the state.⁵ Accordingly, the Scoping Plan provides further evidentiary support for the City’s conclusion that the City’s phase out of oil extraction activities in the City over the next 20 years would not result in a need to increase the importation of oil into California.

Furthermore, the commenter fails to acknowledge the State is moving away from petroleum products and gasoline powered cars, and recently banned the sale of new vehicles solely powered by gasoline in the State after 2035. Thus, it is more likely that overall demand for gasoline will in fact decrease in the next 20 years making it unlikely that the Ordinance will have any impact on fuel consumption or prices in the County. Further, the Ordinance does not impact offshore drilling which accounted for more than half of the oil extracted in Los Angeles in 2018.⁶

The Southern California Association of Governments (SCAG) prepares the regional transportation plan (RTP) for Los Angeles and its surrounding counties and produces estimates of fuel oil consumption every four years. The 2020 RTP estimates a 20 percent reduction in fuel consumption across the region by 2045 (See 2020 Connect SoCal Program EIR, 3.6 Energy, Table 3.6-4) and includes the following statement:

“Despite an increase in total VMT, total fuel consumption would be reduced through improved fuel economy and increased efficiency in the overall network (measured as total hours of delay)... and more alternative fuel and zero emissions vehicle types on the road. In accordance with EO B-48-18, five million ZEV’s are expected to be on California roadways in 2030. Additionally, CARB’s fuel efficiency regulations have reduced diesel fuel consumption in heavy-duty trucks by 500 million gallons in California from 2010 to 2020 through improvements in tractor and trailer aerodynamics, which would reduce fuel consumption ...”

Los Angeles County could see even greater reductions in fuel consumption as more transit-oriented development is constructed, reducing the need for car travel, and as the regional transit system is further built out. Los Angeles Metro has numerous key transit improvements, many of which are anticipated to be operational by 2028, that will also further reduce the City’s reliance on gasoline.

⁵ California Air Resources Board (CARB), 2022 Scoping Plan for Achieving Carbon Neutrality. November 2022 p.103.

⁶ Western States Petroleum Association, Contributions of the Oil and Gas Industry to Los Angeles County. June 2020 p.4.

Finally, local and state policies supporting petroleum independence are documented in the administrative record. As stated on Pages P-7 through P-8 of the City Planning Commission Staff Recommendation Report:

“Further, both California and Los Angeles have, in recent years, adopted and/or implemented regulations, policies and initiatives that clearly indicate both the City and state are moving away from petroleum dependence. These include:

- In 2018, California mandated that new single-family homes, as well as multi-family dwellings up to three stories high, must include solar panels starting in 2020. A second mandate was also voted into law, requiring new commercial buildings to have solar panels and battery storage as well.⁷
- California plans to ban the sale of new gasoline powered cars by 2035.⁸
- Los Angeles City Council unanimously voted in May 2022 to ban gas stoves in new Los Angeles buildings and require only electric stoves and ovens.⁹
- Los Angeles Green New Deal proposes:¹⁰
 - LADWP will supply 55% renewable energy by 2025; 80% by 2036; and 100% by 2045.
 - All new buildings will be net zero carbon by 2030; and 100% of buildings will be net zero carbon by 2050.
 - To increase the percentage of zero emission vehicles in the city to 25% by 2025, 80% by 2035, and 100% by 2050.
 - To electrify 100% of Metro and LADOT buses by 2030.
 - To reduce port-related GHG emissions by 80% by 2050.
 - To improve the raw scores of CalEnviroScreen indicators of L.A. communities in the top 10% by an average of 25% by 2025 and 50% by 2035.
 - To reduce the number of annual childhood asthma-related emergency room visits in most contaminated neighborhoods to less than 14 per 1,000 children by 2025 and 8 per 1,000 children by 2035

⁷ State of California Governor’s Office of Planning and Research, California Energy Commission, “Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation.” 2018.

⁸ State of California Air Resources Board, Advanced Clean Cars II Regulations Resolution 22-12. 2022.

⁹ See Council File No. 22-0151 - relative to a plan for the implementation of an Ordinance and/or regulatory framework that will require all new residential and commercial buildings in Los Angeles to be built so that they will achieve zero-carbon emissions. May 2022.

¹⁰ City of Los Angeles, City of Los Angeles Green New Deal Plan, Sustainability Plan. 2019.

Each of these policies signal a long-term shift away from petroleum and natural gas resources to renewables and electricity. Further, more recent plans prepared by the City, such as the Air Quality Element, Safety Element, Conservation Element, Health, Wellness and Equity Element (Plan for a Healthy Los Angeles), and the Land Use Element (West Adams-Baldwin Hills-Leimert Community Plan, Harbor Gateway Community Plan, and Wilmington Harbor City Community Plan), all include policies geared toward reducing reliance on petroleum and natural gas.”

Topical Response 5: Health Risks

Claims that the IS/MND does not analyze health risk impacts as required by CEQA are false. Page 44 of the IS/MND appropriately evaluates potential health-related risks associated with diesel particulate matter (DPM) emissions under the Ordinance. As stated therein, because current methodologies for conducting health risk assessments are associated with long term exposure periods (9, 30, and 70 years) and typical abandonment activities are expected to last for approximately 10 work days, short-term abandonment activities would not have the potential to generate a significant health risk.

The assertion that the IS/MND failed to include a required Health Risk Assessment (HRA) is invalid and the citation of a screening level HRA prepared by Yorke for the Ordinance has been reviewed and responded to below. First, an HRA is not required for the Ordinance and a detailed HRA is not necessary to substantiate the IS/MND’s conclusion of less-than-significant health-related impacts. The California Office of Environmental Health Hazard Assessment (OEHHA) Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments, February 2015 (OEHHA 2015) provides HRA procedures for use in the Air Toxics Hot Spots Program or for the permitting of existing, new, or modified stationary sources. Thus, the OEHHA 2015 guidance and associated calculations used in Yorke’s HRA are not directly applicable to temporary and short-term emissions associated with well abandonment under the Ordinance. While OEHHA 2015 offers limited information on conducting a short-term HRA, the guidance acknowledges the many inherent uncertainties that may occur, and it does not identify the types of short-term projects or non-stationary projects subject thereto. Furthermore page 8-18 of the OEHHA 2015 guidance states “Due to the uncertainty in assessing cancer risk from very short-term exposures, we do not recommend assessing cancer risk for projects lasting less than two months at the maximally exposed individual resident (MEIR). We recommend that exposure from projects longer than 2 months but less than 6 months be assumed to last 6 months (e.g., a 2-month project would be evaluated as if it lasted 6 months). Exposure from projects lasting more than 6 months should be evaluated for the duration of the project.” The IS/MND clearly states that abandonment would not typically require more than 10 work days, which was verified during consultation with CalGEM staff. Yorke offers no credible evidence to support that well abandonment would typically

last longer than 10 work days. For these reasons, it is clear that the Ordinance does not meet the criteria necessitating the preparation of an HRA. Furthermore, the SCAQMD has not opined on, and has not adopted any results or guidance related to, the application of OEHHA 2015 guidance to short-term and temporary activities contemplated under the Ordinance and it would be speculative to conduct such an analysis without SCAQMD's necessary guidance and oversight.

While it is clear that an HRA is not required nor appropriate for the Ordinance, additional responses have been provided below to illustrate key inadequacies in Yorke's screening level HRA as it:

1. Improperly relies on unsubstantiated and overestimated DPM emissions;
2. Improperly characterizes DPM emissions;
3. Applies erroneous and inaccurate exposure durations;
4. Used incorrect equipment type and associated dispersion factors per SCAQMD;
5. Fails to meet standards for a screening level HRA.

With regard to Item 1, Yorke's screening level HRA improperly relies on unsubstantiated and overestimated DPM emissions. As described under Topical Response 4 'Emissions During Abandonment' heading above, Yorke's assumptions regarding equipment and the associated emissions (including DPM) are not based on relevant information and are not considered reasonable assumptions predicated on fact. Further compounding Yorke's unsubstantiated DPM emissions calculations, Yorke speculates that all of the purported missing equipment (and associated DPM emissions) would be used in addition to the equipment already included in the IS/MND (see Yorke Attachment 2). The comment provides no credible evidence for this assumption and does not substantiate what equipment and intensities will be required for well abandonment under the Ordinance. Thus, the comment is not supported by facts and the speculation results in a significant overestimation of DPM emissions claimed by Yorke. The screening level HRA prepared by Yorke improperly relies on overestimated DPM emissions to make its revised health risk calculations (see Yorke Attachments 2, 3 and 4), resulting in unrealistic and substantially overstated health risks.

With regard to Item 2, the comment improperly characterizes all of the Ordinance's particulate matter emissions as DPM emissions (see Yorke page 8). Yorke's HRA assumes that all particulate matter emissions with a diameter of 10 microns or less (PM₁₀) are DPM emissions. However, this assumption is not substantiated and is inconsistent with the California Air Resources Board (CARB) characterization of DPM. CARB states that more than 90% of DPM is less than 1 micron in diameter (about 1/70th the diameter of a human hair), and thus is a subset of particulate matter less than 2.5

microns in diameter (PM2.5).¹¹ Therefore, in assuming all PM10 emissions would be considered DPM, Yorke overestimates DPM emissions and the purported health risks are not supported by substantial evidence.

With regard to Item 3, Yorke's HRA applies an erroneous and inaccurate exposure duration when calculating cancer and non-cancer chronic health risks. As noted in Yorke Tables 1 and 2 (see Yorke page 10), the risk calculations for a single-well abandonment scenario were based on a 2-year exposure. In addition to this error, Yorke's calculations incorrectly assume abandonment emissions would occur continuously for 8 hours per day, 7 days per week, and 52 weeks per year (see Yorke Attachment 3, page 1, operation schedule). Yorke offers no explanation for these assumptions, and the assumptions are clearly inaccurate given the IS/MND clearly states that abandonment would not typically require more than 10 work days and would not occur on Sundays. Although not clearly explained in the comment letter, Yorke's screening-level calculations assume emissions would occur continuously for two years from one source location, affecting the same single receptor location. This assumption is clearly erroneous as well-abandonment locations and associated receptor locations would be spread across the entire City. Health risks associated with DPM exposure are a localized concern affecting a receptor in proximity to a specific source, yet Yorke offers no explanation supporting their assumption that a single-well abandonment scenario would affect the same single receptor for two years continuously. For these reasons, Yorke's assumptions and application of a 2-year exposure duration for an activity that would last 10 days clearly yields incorrect, unrealistic, and significantly overestimated health risks.

With regard to Item 4, Yorke applied incorrect source equipment types and associated dispersion factors in the screening-level calculations, resulting in substantially overestimated health risks. As shown in Yorke Table 2 in Attachment 3 and Attachment 4, Yorke selected 'other' under equipment type when using the SCAQMD Risk Tool V1.105. However, the risk tool offers several source equipment types, including diesel internal combustion engines which is reflective of the equipment that would be used under abandonment. This is an important error in Yorke's screening-level calculations as the dispersion factors applied by the risk tool for 'other' sources yield much higher risks compared to the dispersion factors built-in to the risk tool specifically defined for diesel internal combustion engines. Dispersion factors are a key component in the Tier 2 screening method used by Yorke. According to the SCAQMD, the concentration of a contaminant decreases as it travels away from the site of release and spreads out or disperses. Dispersion factors (χ/Q) are numerical estimates of the amount of dispersion

¹¹ California Air Resources Board (CARB), Overview: Diesel Exhaust & Health, <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health>. Accessed 25 October 2022.

that occurs under specific conditions. The amount of dispersion depends on the distance traveled, the height of release, and meteorological conditions such as wind speed and atmospheric stability. The dispersion factors for the screening risk assessment procedure give the estimated annual average ground-level concentration ($\mu\text{g}/\text{m}^3$) resulting from a source emitting one ton/year of a contaminant. This means that if dispersion factors are incorrect, then the resulting concentrations of a contaminant and associated health risk calculations would also be incorrect. Yorke Table 2 in Attachment 3 and Attachment 4 cites to Table 6 and Table 6.4 for chronic and acute dispersion factors (χ/Q) identified in SCAQMD Permit Application Package “N”.¹² However, Tables 6 and 6.4 in SCAQMD Permit Application Package “N” provide dispersion factors to be used for general non-combustion point source equipment. Yorke used a dispersion factor of 36.19 for the chronic scenario (Yorke identified the Long Beach Airport as the representative project location). However, because Yorke’s screening-level assessment is evaluating the use of diesel internal combustion engines, Yorke should have selected diesel internal combustion engines as the source type and also should have used Tables 10 and 10.6 in SCAQMD Permit Application Package “N” which specifically provides dispersion factors to be used for diesel internal combustion engines based on their power ratings. As shown in Table 10.4A in SCAQMD Permit Application Package “N”, the diesel internal combustion engine chronic dispersion factor would be 10.06 based on the BHP rating cited by Yorke for the workover rig and mud pump that was assumed in their calculations. Based on this error, the chronic dispersion factor used by Yorke was almost four times higher than it should have been, resulting in incorrect, unrealistic, and significantly overestimated health risks.

With regard to Item 5, the USEPA defines a screening-level assessment as an exposure assessment that examines exposures that would fall on or beyond the high end of the expected exposure distribution. Screening-level assessments typically use readily available data and conservative assumptions to estimate a high-end exposure of the exposure to a sensitive receptor.¹³ As described above, Yorke did not use readily available data, and instead, made several erroneous assumptions that were not based on relevant information. Thus, while it is acknowledged that screening-level HRA’s such as Yorke’s tend to err on the side of caution and are known to overestimate health risks, even screening-level HRA’s must accurately characterize a project’s potential emissions

¹² SCAQMD, Permit Application Package “N”, For Use in Conjunction with the Risk Assessment Procedures for Rules 1401, 1401.1, and 212 Version 8.1. <https://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf?sfvrsn=12>. Assessed 23 November 2022.

¹³ USEPA, Exposure Assessment Tools by Tiers and Types - Screening-Level and Refined. <https://www.epa.gov/expobox/exposure-assessment-tools-tiers-and-types-screening-level-and-refined>. Assessed 23 November 2022.

and apply justified exposure assumptions. Based on the responses provided above, it is clear Yorke does not accurately characterize the reasonably foreseeable emissions associated with implementation of the Ordinance and does not apply justified exposure assumptions.

For these reasons, the screening level HRA prepared by Yorke is not based on substantial evidence, and therefore, does not support a fair argument that the Project may have a significant effect on the environment.

While it is clear that the comment does not constitute a fair argument that the Project may have significant air quality impacts, the City has determined the use of Tier 4 engines as stated in Mitigation Measure AQ-1 included in Errata No. 2 would reduce air quality emissions during abandonment, further protecting public health. As shown in greater detail in Errata No. 2, MM AQ-1 would serve to substantially reduce air quality emissions during abandonment, including particulate matter exhaust emissions. Specifically, particulate matter exhaust emissions would be reduced by approximately 68%. The imposition of AQ-1 does not constitute a substantial change that would require major revision to the previously published IS/MND due to new or increased impacts as it does not substantially change the Project. In fact, with the addition of the MM AQ-1, air quality emissions associated with short-term and temporary abandonment related activities would be reduced even further. As such, this change does not substantially modify the analysis or conclusions of the document, but instead further substantiates conclusion and/or clarifies aspects of the previously circulated document.

Topical Response 6: Noise

The comment states the IS/MND's analysis of noise impacts associated with implementation of the proposed Ordinance fails to comply with CEQA because the City allegedly (1) used the incorrect thresholds and methodology, (2) relied upon incorrect assumptions related to the timing of oil well abandonments, and (3) failed to identify adequate and enforceable mitigation measures. With respect to item 1, the City utilized an appropriate threshold of significance for temporary and episodic noise generated by the equipment used to abandon oil wells.

The threshold utilized by the City would ensure that noise levels from well abandonment activities near sensitive uses would be kept well below the levels that could result in health effects. The threshold used in the IS/MND relies in part on the current City noise regulations intended to ensure that noise levels do not exceed levels that would impact public health and safety. Per Cal/OSHA, the permissible noise exposure for 8 hours is 90

dBA (L_{eq}).¹⁴ In addition, the Federal Transit Authority (FTA) also states that there may be adverse community reaction to construction noise and sets forth its own criteria of 80 dBA $L_{eq(8-hour)}$ for FTA construction activity noise near residential uses during daytime hours. The IS/MND's noise threshold of 75 dBA is well below the permissible noise exposure levels and noise limits for potential hearing loss, and is below the FTA's standards for evaluation construction noise. Thus, the IS/MND's threshold is more restrictive than other established noise limits. Specifically, the Los Angeles Municipal Code, Section 112.05 identifies a noise threshold for equipment of not exceeding 75 dBA at a distance of 50 feet from the equipment in residential zones or within 500 feet of a residential zone. The threshold the City used in the Initial Study supporting the MND expanded this to include additional sensitive uses as identified in the IS/MND.

Citing to *King & Gardiner Farms, LLC v. County of Kern* (2020)¹⁵ the commenter claims the City was not only required to analyze the potential for well abandonment activities to exceed the maximum level of 75 dBA at 50 feet but also analyze the increase in noise levels from the prevailing ambient noise level. However, this misrepresents the holding of *King & Gardiner* and the City's responsibilities and authority under CEQA to use a threshold of significance that is supported with substantial evidence. A calculation of the net increase of noise levels over ambient conditions may be appropriate for a project that has the potential to increase long-term operational noise levels, which was the scenario contemplated in the case cited in the comment. As discussed in the IS/MND, and not challenged by the commenter, the Ordinance would not have the potential to increase long-term operational noise levels and would likely result in a net decrease in long-term operational noise levels associated with oil and gas drilling in the City. Thus, a net-increase calculation of future long-term operational daily averages (i.e., over a 24-hour period) is not appropriate for the Project's short-term, temporary, and episodic noise levels during well-abandonment over a 10-day period. Furthermore, the City's use of the 75 dBA maximum threshold, and decision to not use an ambient increase threshold, for noise associated with well abandonment activities is supported by the following:

- This approach is consistent with many agencies and jurisdictions within the State, including the FTA, Beverly Hills, Fresno, Pasadena, and Caltrans, that do not have a threshold for a numeric increase in ambient noise levels for construction activities. As stated above, the well abandonment activities are similar in character to construction activities.

¹⁴ Cal/OSHA, Title 8 Regulations, Subchapter 7. General Industry Safety Orders, Group 15. Occupational Noise, Article 105. Control of Noise Exposure, §5096. Exposure Limits for Noise, Table N-1 Permissible Noise Exposure.

¹⁵ *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814.

- Potential human health impacts are addressed by the absolute maximum threshold utilized in the IS/MND.
- Daytime hours experience higher levels of noise due to additional sources of noise such as traffic noise, maintenance activities, construction activities, etc. As set forth in the IS/MND, it is anticipated that well abandonment activities will generally occur during the daytime.
- The well abandonment activities, like construction activities, are temporary and periodic. As set forth in the IS/MND, based upon information obtained from experts, typically a well abandonment requires approximately ten (10) days to complete.
- This approach recognizes the urban environment of the City and that daytime construction activities are commonplace (i.e., it is not expected that daytime activities would affect people sleeping). Potential human health impacts are addressed by the absolute maximum thresholds utilized in the initial study.
- While ambient increase below the absolute maximum threshold may result in increases above 20 DB in certain circumstances, which may cause annoyance, this would not result in health impacts. The type of annoyance that could occur from such ambient increases is reasonable in the City's urban environment, including because the increase would be temporary and periodic in nature. Additionally, if the ambient increase is below the maximum increase, such noise increases should not prevent residents and occupants in the City from undertaking typical activities.

The commenter also claims that the noise analysis utilized incorrect assumptions related to timing, claiming the City should have assumed that certain well abandonments would occur concurrently. However, the commenter has failed to provide any evidence supporting its determination. The noise and vibration analysis in Appendix B determined that only well abandonments occurring within 50 feet of residential and sensitive uses required mitigation to reduce the noise to less than 75 dBA. The mitigation measure identified in the IS/MND applies regardless of whether a single well is being abandoned or more than one well is abandoned at the same time at a particular site. Furthermore, the commenter has failed to provide any evidence of locations where the proposed mitigation measure would not foreseeably reduce noise levels to below 75 dBA at 50 feet. In addition, the noise and vibration analysis in Appendix B was conservative as the noise and vibration measurements assumed all of the equipment used for well abandonment was operating at the same time. Finally, the noise mitigation measure is clear and enforceable. The mitigation measure states:

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.

The IS/MND states that this mitigation measure is feasible. Additionally, the mitigation measure does not provide any exceptions to its application to well abandonment activities. Specifically, it is not excused if it is later determined to be “technically infeasible.”

In addition, the proposed Ordinance includes the following provision: “A well operator as defined by Public Resources Code Section 3237 shall comply with the mitigation measures and mitigation monitoring program adopted with Ordinance No. ____ in the plugging and abandoning of all wells.”¹⁶ Therefore, the Ordinance makes compliance with the mitigation measures mandatory. The Mitigation Monitoring Program assigns the Los Angeles Fire Department (LAFD) as the enforcing and monitoring department as well as requires operators to obtain permits from LAFD prior to proceeding with well abandonment.

Attachments

Attachment 1 - California Air Resources Board (CARB), 2022 Scoping Plan For Achieving Carbon Neutrality - November 16, 2022

¹⁶ Department of City Planning, Draft Oil and Gas Drilling Ordinance (CF 17-0447; CPC-2022-4864-CA), Section 3.C.4.(f). September 2022.