
March 25, 2014

Mr. Saied Naaseh
Planning Division
City of Carson
701 East Carson Street
Carson, CA 90745

CC: Planning Division

Attn: DRAFT ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE DOMINGUEZ OIL FIELD DEVELOPMENT PROJECT PROPOSED BY OXY USA, Inc.

Dear Mr. Naaseh,

Thank you for the opportunity to submit written comments on the Draft Environmental Impact Report (DEIR) as required by the California Environmental Quality Act (CEQA) Public Resources Code §21000 et seq. CEQA requires that the environmental impacts of proposed projects be evaluated, and that feasible methods to reduce, avoid, or eliminate significant adverse impacts of these projects be identified and implemented.

OXY USA Inc. (OXY) is proposing the construction and operation of a new oil and gas facility to develop a portion of the Dominguez Oil Field. The proposed project (project) is located at 1450 – 1480 Charles Willard Street, and will consist of up to 202 wells (2 existing test wells and 200 new wells), an oil and gas processing facility, water treatment facility, water injection operations, slurry injection and disposal operations, an electrical connection, an emergency flare, and shipping and pipeline facilities. The project is predicted to produce and transport approximately 6,000 barrels of oil per day, and three million standard cubic feet of natural gas per day. Wells will be constructed to depths of 4,000 to 13,500 feet underground in order to locate oil reservoirs.

We recognize the tremendous time and staff expertise that staff at the City of Carson has invested in preparing the DEIR. The subsequent Final EIR must be consistent with the requirements of CEQA (Public Resources Code Division 13, commencing with Section 21000) and the State CEQA Guidelines (California Code of Regulations Chapter 3, commencing with Section 15000). The Final EIR must provide the public with detailed information, and thoroughly and fully evaluate the potential effects associated with oil and gas development within the proposed scope of the project.

Although the DEIR addressed impacts that would result from conventional oil and gas reservoirs, the study failed to address the impacts of potential future well stimulation activities associated with non-conventional extraction. OXY has previously stated that no unconventional well stimulation would take place for the project, however, it is necessary to fully understand all risks as circumstances may change that would force unconventional extraction techniques to be employed. We wish to ensure that the Final EIR covers all the issue areas as required by CEQA. A full life cycle

analysis of development in the Dominguez Oil Field, from planning, to construction, to production, to transport, and to use of the extracted hydrocarbons, must be included in order to present a full and clear picture of the process. When negative and adverse potential impacts are detected, mitigation measures and alternatives must be looked at to minimize the impacts to Carson's people, economy, and environment.

Given the large scale nature of the project that is envisioned by OXY, and the potentially harmful methods that are to be used, the City of Carson, acting as the lead agency preparing the EIR, must conduct an in depth, comprehensive analysis to ensure the protection of public health and the environment. Based on the history and records of environmental and health impacts caused by oil and gas development, the significant possibility exists that drilling more than 200 production and wastewater injection wells in the city, will have a detrimental impact on environmental quality and public health, including, but not limited to: water quality, air quality, greenhouse gas (GHG) emissions, produce an unacceptable risk to lives and infrastructure due to its proximity to an active seismic fault line, and have a disadvantageous effect on Carson's most vulnerable communities – issues that already plague the city. It is essential for the City of Carson to consider and guard against negative impacts of expanded development in the Dominguez Oil Field — and thus protect people, economy, and the environment of the city.

As stated in the DEIR, the project will have significant impacts for the community and environment of Carson. In order to prevent long-term damage, the following must be addressed:

- The City of Carson recognizes the need to better understand the impacts oil and gas development in the Dominguez Oil Field. The Final EIR will likely reflect public comments and additional information not in the DEIR — resulting in new analyses of impacts and proposed mitigation measures. Because of this, the City of Carson should not permit the project, and should extend the temporary ban on development approved on March 18, 2014, until a Final EIR is completed.
- The project states that for the first ten wells drilled, 4,500 gallons of water per day will be required. The water used will be potable water, which could also be utilized for human or agricultural uses. Because of the extended drought currently being experienced by the State of California, the use of large quantities of water for oil and gas production would be detrimental to the communities of Carson.

The City of Carson lies in the Los Angeles River Basin, and over important groundwater sources for millions of Southern California residents. The significant possibility exists that surface and groundwater quality would be contaminated due to spills and accidents. Although some methods of recycling make produced water from drilling activities available for agricultural uses, there is no guarantee on the quality of this water, and this water is classified as not safe for human or animal consumption. Clear plans for mitigating water quality and quantity issues are necessary to prevent negative environmental and economic impacts.

Additionally, a study of well casing and cementing procedures will help develop better mitigation measures when a failure occurs, thereby reducing the risk of contamination of groundwater resources. Poorly understood oil and gas development and reinjection activities may further degrade the quality of groundwater sources, and increase the possibility of related seismic activity.

- The City of Carson suffers from federal and state air quality non-attainment for particulates less than 2.5 microns (PM2.5). Additional urban areas, including the entire Los Angeles Basin, also suffer from severe air pollution. Increased construction activities, traffic, long-term maintenance and operational activities of drilling, transport, and burning of extracted fossil fuels, will generate significant amounts of air pollutants. Facilities classified as sensitive receptors, such as schools and residences, are located throughout planned areas of development, including a student housing complex for California State University Dominguez Hills, which is located less than 1,800 feet from

the proposed project area. These areas will be exposed to high levels of exhaust and emissions from construction and operations, and expanded operations of existing wells.

The Final EIR must assess air emissions from all stages of oil and gas recovery, including drilling, completion, well stimulation, production, and disposal. Air toxics and hazardous air pollutants pose a serious risk to human health, and the Final EIR must consider the chemicals potentially used in these processes, as well as the heavy industrial activities themselves, and the possible effects of each chemical on public health and the environment. For example, construction activities associated with the project would result in increased emissions of carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur oxides (SO_x), and PM₁₀ and PM_{2.5}. Cumulative contributions of emissions that will reduce air quality must be properly evaluated to ensure that public health is protected, and determine whether expanded oil and gas production will conflict with implementation of plans for air quality attainment under applicable state and federal laws.

- CEQA requires a discussion of “significant irreversible environmental changes, which would be involved in the proposed project should it be implemented” - CEQA Guidelines § 15126(c). Greenhouse gases have direct implications for global climate change. Passed in 2006, Assembly Bill 32 (AB32), The Global Warming Solutions Act, requires California to reduce GHG emissions to 1990 levels by 2020. Signed in 2008, Executive Order 14-08 requires California utilities to reach a renewable energy goal of 33% by 2020. Use of natural gas and heavy crude from California’s oil fields will be detrimental to achieving the goals of emissions reductions and increased use of renewables. Emissions such as methane (a powerful GHG with a global warming potential 86 times higher than carbon dioxide (CO₂)), NO_x, ozone, and CO₂, will come from construction activities, increased operations from existing equipment, potential future development operations, as well as the combustion of petroleum and natural gas that is extracted, not to mention fugitive emissions from drilling activities. In furtherance of both CEQA, and the stated goals of the state of California, the Final EIR should include an analysis of the impact the project would have on the emissions of greenhouse gases such as CO₂, methane, chlorofluorocarbons, and ozone precursors. It must also include a discussion of the project’s consistency with applicable policies and regulations, adopted to reduce greenhouse gases, as well as the measures and technologies that would be undertaken to keep these emissions to a minimum. A full life cycle analysis of GHG emissions is necessary to ensure compliance under California laws designed to reduce the impacts of climate change, reduce dependence on fossil fuels, and protect natural resources, public health, and other economically vital industries.

- Since the 1960s, scientists have known that injection of fluids at high pressures underground can trigger earthquakes. Scientific studies have directly linked fracking, and underground injection of oil and gas wastewater, to seismic events in Oklahoma and British Columbia. In areas where underground injection has increased, seismic activity has increased as much as ten fold. The National Academy of Sciences has recommended that states look into the effects of induced seismicity and underground injection. The proposed project in Carson is located just 1.9 miles from the Newport-Inglewood fault. This fault has been very active in the past, and is already under pressure from wells currently located in the Inglewood field.

The Southern California region lives in fear of when the “big one” will strike. Although the DEIR points out that all water extracted during the production process will be reinjected to prevent subsidence and ground movement, the proposed project estimates that 20,000 barrels of wastewater will be injected underground, in addition to the water that comes from the production on site.

Increased seismicity in Carson would put the community’s lives, property, and infrastructure at risk. A comprehensive analysis of all seismic faults in the area, along with the risks associated with increased underground injection, is necessary to safeguard the lives of all citizens in Carson.

- The Final EIR must assess the environmental impacts of oil and gas recovery using the full range of chemicals used in the process. New technology and techniques for extraction, disposal, and stimulation rely heavily on harmful chemicals to achieve high rates of production. Only if these chemical ingredients are disclosed and known can an adequate assessment of risk occur, and the EIR must contemplate the need for such an assessment in order to protect public health and the environment. The EIR must disclose and consider the risk of any failure to obtain full knowledge of the chemicals used—and chemicals released—in these processes. The EIR must also consider the potential impact of the use of all chemicals used in activities related to the project on the environment, groundwater, surface water, agriculture, and public health.
- The Final EIR must present an accurate environmental baseline. Under CEQA, the baseline conditions for determining “significant impacts” are those local and regional conditions that exist when the NOP is made available for review. See CEQA Guidelines, §15125(a) (an EIR must describe the “physical environmental conditions in the vicinity of the Project, as they exist at the time the notice of preparation is published . . . from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant.”). The final EIR must include not only a detailed analysis of the current levels of noise and air pollution, but also light pollution, water contamination, as well as traffic vibration, and make a realistic comparison of the environmental impacts of the proposed project versus the existing conditions.
- The Final EIR must contain a comprehensive health risk assessment. This proposed project could generate a tremendous amount of potential air and water pollutants. The Final EIR should include a full emissions inventory with predicted future pollution levels and a full health risk assessment (“HRA”) that includes the level of toxic risk, as well as pollution that the nearby communities will face from this proposed project. The HRA should identify all sensitive populations that could be impacted by the project, and accurately assess the toxic air contaminant and criteria air pollutant risks that neighboring residents, workers, and recreational users will have to bear as a result of project related activities.
- As of the 2010 Census, in the City of Carson, 23.8% of the population identified as Black or African America, 25.6% as Asian, and 38.6% as Hispanic or Latino. While 80.2% of the population identified as having a high school degree, that number drops to 23.9% for those possessing a Bachelor’s degree or higher. Communities surrounding areas of existing oil and gas development, or areas where the industry wishes to expand, are often home to low-income minorities who may have limited skills and education.

As studies have shown in the past, jobs from expanded development often do not go to locals, but to people who migrate to the area from other states and countries. Local communities will suffer from increased housing prices, inflation, and displacement due to this migration, as has been observed throughout oil and gas fields in Pennsylvania and North Dakota. Over time, additive effects of industrial development, such as social inequality and environmental justice issues, will further erode the base of sustainable economic development for Carson. A complete cumulative impacts study is necessary in order to fully analyze the impacts of increased oil and gas development on the poor, minorities, and Carson’s most vulnerable communities, and mitigate any potentially significant negative effects.

The best analysis, by itself, cannot protect the public health and the environment from the impacts of energy development. It is necessary for the City of Carson to consider all possible alternatives, as well as all the cumulative impacts associated with expansion of oil and gas development in the city. The Final EIR must include a comprehensive environmental review, a full economic analysis, a vigorous health impact study, and an extensive public review period to safeguard the public, the environment, and the sustainability of Carson’s economy.

Sincerely,

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