



April 14, 2014

Mr. Ken Robertson  
Community Development Director  
City of Hermosa Beach  
1315 Valley Drive  
Hermosa Beach, CA 90254

Attn: DRAFT ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE E&B OIL DRILLING AND PRODUCTION PROJECT

Dear Mr. Robertson,

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.

Earthworks is a nonprofit organization dedicated to protecting communities and the environment from the impacts of irresponsible mineral and energy development, while seeking sustainable solutions. For twenty-five years, we have worked nationwide to advance policy reforms, improve corporate practices, and safeguard land and public health. Founded in 1999, the Oil & Gas Accountability Project (OGAP) of Earthworks works with local communities, landowners, organizations, agencies, and elected officials to advance these goals, while also providing information and support to citizens and groups conducting public awareness and advocacy efforts at the local and state level.

E&B Natural Resources Management Corporation (E&B), is proposing an oil and gas facility to develop a portion of the Torrance Oil Field. The proposed project (project) is a 1.3-acre site located at 555 6<sup>th</sup> Street in the City of Hermosa Beach (Hermosa Beach), consisting of 34 directionally drilled wells (30 oil producing wells and 4 water injection wells), a laydown site for heavy equipment and supply staging/storage, and a parking lot. Additionally, underground oil and gas pipelines will be constructed on and off site for the transportation of processed crude to refineries and purchasers. These pipelines will extend from the project site, and cross the Cities of Redondo Beach and Torrance. The project is predicted to produce 8,000 barrels of oil per day, and 2.5 million standard cubic feet of natural gas per day.

The project is moving forward pursuant to the March 2, 2012 Settlement Agreement between Hermosa Beach, E&B, and Macpherson Oil Company. Once the Final EIR is completed, a ballot measure will be placed in the next election, allowing the local electorate to decide whether or not to approve the project, along with a Development Agreement to vest the project, so that, if approved, it cannot be later invalidated by the people. The proposed site is owned by Hermosa Beach, and is currently being used as the city's maintenance yard. Should the project move forward, the maintenance yard would have to be relocated.

We recognize the tremendous time and expertise that staff at the City of Hermosa Beach 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 extraction, the study failed to address the impacts of potential future well stimulation activities associated with unconventional extraction. E&B has 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. Practices such as hydraulic fracturing, acidizing, and gravel packing have been known to contaminate ground and surface water sources, cause increased air pollution, damage public health, and induce seismic activity. We wish to ensure that the Final EIR covers all the issue areas as required by CEQA.

A full life cycle analysis of development for the project, 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 Hermosa Beach's people, economy, and environment.

Given the scale of the project that is envisioned by E&B, and the potentially harmful methods that are to be used, the City of Hermosa Beach, acting as the lead agency preparing the EIR, must conduct an in depth, comprehensive analysis of all possible extraction methods 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 two dozen production and wastewater injection wells in the city will have a detrimental impact on environmental quality and public health.

According to the DEIR, the proposed project would generate "potentially significant and unavoidable environmental impacts" in aesthetics, air quality, biology, hydrology, land use, noise, and recreation. Any use of unconventional well stimulation, such as fracking, would exacerbate these issues, and cause an unacceptable level of risk to the public, infrastructure, and property of Hermosa Beach. For example, active seismic faults are located approximately 2-3 miles offshore to the west of the project site, with another fault found approximate 3-4 miles to the south of the project site. Active fracking and injection has been shown to increase seismic activity as much as ten fold in states such as Texas and Oklahoma. In April 2014, a state investigation in Ohio directly linked fracking to earthquakes in the state. Increased production of the Torrance Oil Field puts the citizens of Hermosa Beach, and the surrounding communities, at risk. It is essential for the city to consider and guard against negative impacts of expanded oil and gas development — 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 Hermosa Beach. In order to prevent long-term damage, the following must be addressed:

- The City of Hermosa Beach recognizes the need to better understand the impacts oil and gas development. 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, any ballot measure allowing the local electorate to decide whether or not to approve the project, should be postponed until a Final EIR is complete, and all methods of conventional and unconventional extraction are clearly understood. This is of particular importance since the voters

will also be approving a Development Agreement, which would prevent invalidation of the project by voters in the future.

- Conventional and unconventional oil and gas extraction uses hundreds of thousands of gallons of water per well. The water that is used is often potable water from groundwater sources, which could also be utilized for human 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 Hermosa Beach.

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 Hermosa Beach lies over important groundwater sources for millions of Southern California residents, and on the shores of sensitive ocean ecosystems of the Pacific Ocean. The significant possibility exists that surface and groundwater quality would be contaminated due to spills and accidents. As stated in the DEIR, a release from the pipeline between the project site and Prospect Avenue, could produce a spill of 4,8000 gallons that could drain directly into the ocean through storm drains. Mitigation measures would be able to reduce the severity of any spill, however, “any impacts would remain significant and unavoidable.” A clear and complete spill prevention plan must be on record before any drilling activities are allowed to commence in order to prevent damage to fragile ocean ecosystems.

- Urban areas, including the entire Los Angeles Basin, 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 very close to the planned area of development. According to the DEIR, the site is 160 feet away from businesses, 160 from residences, 55 from the Greenbelt, and 20 feet from public sidewalks. These areas will be exposed to high levels of exhaust and emissions from construction and operations.

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 (NOx), sulfur oxides (SOx), and particulate matter (PM) of 10 microns and PM2.5 microns. 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 (CO<sub>2</sub>)), NO<sub>x</sub>, ozone, and CO<sub>2</sub>, will come from construction activities, increased operations from 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 CO<sub>2</sub>, 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. Under Ohio's new permit conditions, implemented in April 2014, "all new drilling sites within 3 miles of a known fault or seismic activity of 2.0 magnitude or higher will be conditioned on the installation of sensitive seismic-monitoring equipment." There are no plans for California to implement similar regulation in the near future.

The proposed project in Hermosa Beach is located approximately 2-3 miles to the east, and approximately 3-4 miles to the north of active seismic faults. The Southern California region lives in fear of when the "big one" will strike. Increased seismicity in Hermosa Beach 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 Hermosa Beach.

- 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 Final EIR must contemplate the need for such an assessment in order to protect public health and the environment. The Final 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 Final 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, ocean resources, 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.

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 Hermosa Beach to consider all possible alternatives, including unconventional methods of extraction, 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 Hermosa Beach’s economy.

Sincerely,



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