

April 14, 2010

To: Members, Assembly Environmental Safety & Toxic Materials Committee

From: Pedro Nava, Chairman

Subject: Investigative Hearing on Public Health Impacts and Environmental Regulation of Oil Drilling and Production in Baldwin Park/ Inglewood Oil Fields

The Assembly Committee on Environmental Safety & Toxic Materials is conducting an oversight hearing on public health and environmental protections needed to adequately regulate oil drilling and production in California.

The issues the Committee will examine include:

- How do State and local agencies with regulatory responsibility assess the public health and environmental hazards associated with oil drilling and production related to the Baldwin Hills/Inglewoods oil fields?
- In the case of oil production facilities in heavily urbanized areas, are there special risks to local communities? Does the current regulatory system sufficiently evaluate and mitigate the level of risk in these urban settings?
- Do the current regulatory agencies have the technical expertise and resources to ensure public health and environmental protection from toxic air and other emissions?

Part 1. Urban oil fields.

The environmental hazards posed to urban development by oil and gas field operations are numerous. These hazards are caused by:

- gas migration along faults,
- subsidence caused by the fluid removal, and
- improperly maintained wellbores.¹

¹ Environmental Geology (2005), "Environmental hazards posed by the Los Angeles Basin urban oilfields: an historical perspective of lessons learned" , G.V. Chilingar & B. Endres, 26 October 2004.

The Baldwin Hills/ Inglewood oil field.

The Baldwin Hills/ Inglewood oil field occupies an irregularly shaped area that extends diagonally across the trend of the hills along the axis of the faulted Inglewood anticline and covers approximately 700 acres. Production and development, mainly by "infill" drilling between wells, continued steadily to the present.

There are currently 436 active producing wells drilled from within the active surface boundary at the Inglewood Oil Field, 207 active water injection wells, 177 shut-in wells, 643 abandoned wells for a total of 1,463 wells within the current surface lease boundary of the oil field (as of 2006). The current production volumes from the Inglewood field are 8,700 barrels per day (bpd) oil, 300,000 bpd water, and 5,700 thousand standard cubic feet per day (mscfd). Recently the number of wells drilled has averaged 36 per year between 2000 and 2007.

Current activities at the Inglewood Oil Field involve extracting oil and gas from subsurface reservoirs located between 1,000 and 10,000 feet deep, processing the crude oil to remove water and processing the gas to remove water and gas liquids (e.g., propane and butane). Drilling is conducted 24 hours per day as stopping the drilling before casing is set could cause the wellbore to collapse around the drilling bit and make the restarting of the drilling operation difficult if not impossible. Crude oil is then shipped by pipeline to area refineries to be processed into gasoline and other products. The gas is shipped by pipeline to The Gas Company for end use by consumers and industry or is shipped to area refineries for use in the refining processes.



- **Over the next 20 years, an average of approximately 53 wells per year could be drilled in the Inglewood Oil totaling 1065 new wells.**

Part 2. California regulation of on-shore oil and gas drilling.

Current state law² directs the State Oil and Gas Supervisor, of the Department of Conservation, to supervise the drilling, operation, maintenance, and abandonment of wells and the operation, maintenance, and removal or abandonment of tanks and facilities used in oil and gas production. In particular, well owners must designate an agent who will receive and accept orders from the supervisor notify the supervisor of a sale or exchange of a well, and to notify the supervisor of well acquisitions. The supervisor is the

² Public Resources Code §3000 et.seq.

chief of the Division of Oil, Gas, and Geothermal Resources (DOGGR) of the Department of Conservation.

The California Attorney General's opinion in 1976 outlines the role of the State, as well as local agencies, in regulating oil drilling and production facilities in California³

"The principal state legislation regulating drilling for the production of oil and gas is contained in Division 3 of the Public Resources Code, sections 3000-3690 and 3780-3787, and is placed under the administration of the Department of Conservation and the State Oil and Gas Supervisor. Public Resources Code section 3106 sets forth the duties of the Supervisor and the purposes and objectives of the statutory scheme. Briefly, these duties are: The supervision of the drilling, operation, maintenance, and abandonment of wells [so] as to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil and gas deposits from infiltrating water and other causes; loss of oil, gas or reservoir energy; and damage to underground and surface waters suitable for irrigation or domestic purposes by the infiltration of, or the addition of, detrimental substances to increase the ultimate recovery of oil and gas and to encourage the wise development of the oil and gas resources...

The provision with respect to damage to life, health, property and natural resources. was added to Public Resources Code section 3106 and to certain other sections (3208, 3218, 3224) by Statutes of 1970, chapter 799. "

Part 3. Local regulation of oil and gas production.

The State regulatory system overseen by the DOGGR of the Department of Conservation may set standards for oil and gas wells. Local agencies, cities and counties may generally establish more stringent standards for oil and gas production as part of local land use planning or in order to provide public health or environmental protection. The Attorney General's opinion from 1976 provides an opinion on the role of State and local regulation:

"Counties and cities may regulate the drilling, operation, maintenance and abandonment of oil, gas and geothermal wells with respect to phases of such activities not covered by state statute or regulation so long as that regulation does not conflict with state regulation concerning other phases of such activities."⁴

County of Los Angeles regulation of Baldwin Hills/Inglewood oil fields.

³ *California Attorney General's Opinion, Regulations on Drilling, Operation, Maintenance, Abandonment of Oil, Gas, and Geothermal Wells*, Opinion No. 76-32, August 24, 1976

⁴ Opinion No. 76-32

The Los Angeles County Board of Supervisors adopted the Baldwin Hills Community Standards District (CSD), which established new development standards and operating procedures for oil and gas production operations in the Baldwin Hills/Inglewood area. According to the County of Los Angeles the goal of the CSD is to ensure that all oil field operations are being performed in the safest manner possible. The CSD establishes implementation milestones that the operator, Plains Exploration and Production Company (PXP), must meet to comply with the requirements of the CSD.

Part 4. New State standards for oil production facilities – AB 1960

Assembly Bill 1960 (Nava, Chapter 562, Statutes of 2008), which became effective January 1, 2009, expands DOGGR's oversight of oil and gas production facilities. AB 1960 requires that DOGGR promulgate regulations prescribing minimum maintenance standards for all oil and gas production facilities in the state. The production facility maintenance standards established by DOGGR must address, at a minimum, leak detection, corrosion prevention, tank inspection and cleaning, valve and gauge maintenance, and secondary containment maintenance.

AB 1960 provides DOGGR with new enforcement authorities and enhancement of existing authority. The new authorities include the authority to impose a life-of-well or life-of-production facility bond on any operator that has a history of violations or that has outstanding liability in connection with its oil and gas operations.

AB 1960 establishes various recordkeeping and reporting requirements related to production facilities. The recordkeeping and reporting requirements established by AB 1960 include: maintaining records of all production facility maintenance, repairs, inspections and testing; reporting to DOGGR any construction, alteration, or decommissioning of a production facility; reporting to DOGGR any acquisition of a production facility; and submitting a spill contingency plan to DOGGR.

Status of Proposed AB 1960 Facilities Regulations.

AB1960 implementing regulations were submitted to the Office of Administrative Law (OAL) on November 10, 2009. During December 2009 and January 2010, public comment hearings were conducted in Cypress, Bakersfield and Sacramento. The public comment period ended January 14, 2010. The numerous comments received are being reviewed.