EDMUND G. BROWN, JR.
Attorney General

State of California
DEPARTMENT OF JUSTICE

1515 Clay Street 20th Floor
P.O. BOX 70550
Oakland, CA 94612-0550

Public: 510/622-2100
Telephone: 510/622-2254
Facsimile: 510/622-2170
E-Mail: Jamie.Jefferson@doj.ca.gov

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TRANSMITTED VIA FACSIMILE AND U.S. MAIL

Lamont Thompson
City of Richmond
Planning and Building Regulations Department
1401 Marina Way South
Richmond, California 94804

RE: Comments on the Chevron Energy and Hydrogen Renewal Project and Draft Environmental Impact Report (Project No. 1101974; SCH# 20050 72117)

Dear Mr. Thompson:

The Attorney General of the State of California submits the following comments on the City of Richmond's Draft Environmental Impact Report ("DEIR") for the Chevron Energy and Hydrogen Renewal Project ("Project").[1] The Project proposes to expand the refining and production capacity of the existing Chevron refinery by up to six percent – approximately 300,000 gallons per day – to enable the refinery to process future crude and gas oil supplies. This Project involves major new construction, including a new and independent hydrogen plant that would emit up to 898,000 metric tons of carbon dioxide per year.

Global warming is a major environmental problem facing California. Projects like Chevron's refinery expansion that significantly increase greenhouse gas emissions ("GHG") will make it more difficult for the State to combat warming and achieve the reductions required by Assembly Bill 32, the California Global Warming Solutions Act of 2006, codified at Health and Safety Code Section 38500, et seq. ("AB 32"). Although increasing the State's refining capacity is a very desirable goal, the refinery's expansion and creation of a new hydrogen plant produce emissions that must be fully disclosed and mitigated. Because the Project's addition of such huge amounts of carbon dioxide per year is a potentially significant cumulative impact on global

[1]The Attorney General provides these comments pursuant to his independent power and duty to protect the natural resources of the State from pollution, impairment, or destruction in furtherance of the public interest. (See Cal. Const., art. V, § 13; Cal. Gov. Code, §§ 12511, 12600-12; *D'Amico v. Board of Medical Examiners*, 11 Cal.3d 1, 14-15 (1974)). These comments are made on behalf of the Attorney General and not on behalf of any other California agency or office. While these comments focus on some of the air quality and global warming issues raised by the DEIR, they are not an exhaustive discussion of all issues.

warming, the City has an obligation under CEQA to analyze and impose feasible mitigation measures to reduce the Project's impacts.

Global Warming in California

The Intergovernmental Panel on Climate Change ("IPCC") of the United Nations recently published its Fourth Assessment Report. In the Report, the IPCC finds that overwhelming evidence establishes that global warming is occurring and is caused by human activity.[2] With respect to impacts in the State, the California Climate Change Center reports that temperatures are expected to rise 4.7 to 10.5 F by the end of the century.[3] If we stay on our "business as usual" emissions trajectory, we can expect temperature changes at the higher end of this range. These increases will have serious consequences, including substantial loss of snow-pack, an increase of as much as 55% in the risk of large wildfires, and reductions in the quality and quantity of agricultural products.[4] Additionally, the Climate Change Center's report predicts increased stress on the State's resources and natural landscapes.[5] Global warming will also derail progress toward attainment of the ozone air quality standard by increasing the number of days that are meteorologically conducive to the formation of ozone.[6]

The DEIR includes a summary of these potentially catastrophic impacts caused by anthropogenic GHG emissions. The DEIR further notes that oil refining is responsible for approximately 5.6 % of the total Bay Area GHG emissions. DEIR, p. 4.3-9.

California's Actions to Address Global Warming

On June 1, 2005, Governor Schwarzenegger issued Executive Order S-3-05. The Order recognized California's vulnerability to global warming and the need for implementation of mitigation measures to limit the impacts to the State. The Order set the following GHG emission reduction targets for California: by 2010, reduce GHG emissions to 2000 levels (approximately 59 million tons of emission reductions); by 2020, reduce emissions to 1990 levels

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[2] "Climate Change 2007: The Physical Science Basis, Summary For Policymakers" (Fourth Assessment Report of the IPCC, February 2007).

[3]Amy Lynd Luers, Daniel R. Cayan et. al, *Our Changing Climate: Assessing the Risks to California* (July 2006) at p. 2. The report was prepared by the Climate Change Center at the direction of CalEPA pursuant to its authority under Executive Order S-3-05.

[4]*Id.* at p. 2,10.

[5]*Ibid.*

[6]Climate Action Team Report, Executive Summary, p.xii (CalEPA March 2006).

(approximately 145 million tons of emission reductions); by 2050, reduce emissions to 80 percent below 1990 levels.[7] The State of California is now working diligently to identify all opportunities for major greenhouse gas reductions.

Assembly Bill 32, the California Global Warming Solutions Act of 2006, codified at Health and Safety Code Section 38500, et seq. ("AB 32"), was signed into law by the Governor on September 27, 2006.[8] AB 32 requires the State reduce GHG emissions to 1990 levels by 2020.[9] Although AB 32 gives the California Air Resources Board ("CARB") until January 1, 2008, to formally identify and publish 1990 statewide GHG emission levels, current data supports the view that in 1990, the atmospheric concentration of carbon dioxide in California's atmosphere was 425 million metric tons; today, the concentration of carbon dioxide has risen steadily to almost 500 million metric tons.[10] AB 32's emissions cap of achieving 1990 levels by 2020 imposes a roughly 25% reduction from current GHG levels or approximately 145 million metric tons of carbon dioxide.[11] The passage of AB 32 demonstrates that the Legislature and Governor recognize the serious threats that global warming poses to California.

AB 32 directs that by June 30, 2007, CARB shall publish a list of discrete early action GHG emission reduction measures that will be implemented by 2010.[12] Included in CARB's identification of early action measures is a low carbon fuel standard – which will require oil refineries and shippers such as Chevron to reduce 20% by the year 2020 the amount of carbon dioxide emissions released in the production and use of motor vehicle fuel. *See* Governor's Executive Order S-01-07 (January 2007). "The standard will be measured on a lifecycle basis in order to include all emissions from fuel consumption and *production*, including the 'upstream' emissions that are major contributors to the global warming impact of transportation fuels." *Id.* (emphasis added). CARB will follow by adopting more comprehensive regulations that will go

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[7]Governor's Greenhouse Gas Reduction Leadership Policy, available at www.climatechange.ca.gov.

[8] Health & Safety Code, § 38501.

[9] Health & Safety Code, § 38550.

[10]California Energy Commission Report, Efficiency and Renewables in the Energy Sector, June 18, 2007, p. 2-3, available at www.energy.ca.gov.

[11] 9/27/2006 Press Release from the Office of the Governor, available at http://gov.ca.gov/index.php?/print-version/press-release/4111.

[12] Health & Safety Code, § 38560.5.

into effect in 2012 to require the actions necessary to achieve the GHG emissions cap by 2020.[13] The legislation also encourages entities to voluntarily reduce GHG emissions prior to 2012 by offering credits for early voluntary reductions.[14]

To further combat global warming, California is encouraging the development of alternative technologies that will reduce reliance on fossil fuels. In April, 2004, the Governor signed Executive Order S-7-04 (April 20, 2004) calling for the development of the California Hydrogen Blueprint Plan and emphasizing that development of hydrogen and fuel cell technologies should employ "policy strategies to ensure hydrogen generation results in the lowest possible emissions of greenhouse gases and other air pollutants."

California Environmental Quality Act

CEQA and its implementing Guidelines provide that in any of the following situations, a finding must be made that the project may have a significant effect on the environment:

> (1) A proposed project has the potential to degrade the quality of the environment, curtail the range of the environment, or to achieve short-term, to the disadvantage of long-term, environmental goals.
>
> (2) The possible effects of a project are individually limited but cumulatively considerable. As used in this paragraph, "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
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> (3) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.[15]

As part of the analysis carried out in an EIR, the agency must formulate mitigation measures and examine alternatives to the proposed project. CEQA mandates that public agencies refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects .[16]

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[13] Health & Safety Code, § 38562.

[14] Health & Safety Code, §§ 38562, subd. (b)(3), 38563.

[15] Pub. Res. Code, § 21083(b); see also Cal.Code Regs., tit. 14, § 15065.

[16] Pub. Res. Code, § 21081; see also *Mountain Lion Foundation v. Fish and Game Commission* (1997)16 Cal.4th 105, 134.

As the Court of Appeal concluded in *Kings County Farm Bureau v. City of Hanford*:

> One of the most important environmental lessons evident from past experience is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant, assuming threatening dimensions only when considered in light of the other sources with which they interact. Perhaps the best example is air pollution, where thousands of relatively small sources of pollution cause a serious environmental health problem. CEQA has responded to this problem of incremental environmental degradation by requiring analysis of cumulative impacts.[17]

DEIR's Description of the Refinery Expansion Project

As set forth in the DEIR, Chevron proposes to expand the refining and production capacity of its existing Richmond refinery by up to six percent or 300,000 gallons per day. The stated purpose of the Project is to produce "clean fuels" required by CARB for use by California consumers. DEIR, p. 3-4. The Project entails the construction of a new hydrogen plant owned, operated and built by a company called Praxair that would generate hydrogen via steam gas turbines using fossil fuels, such as refinery gas and/or natural gas provided by PG&E. DEIR, p. 3-28-29. The DEIR also discloses that Praxair, has filed an application to construct a 21.5 mile export hydrogen pipeline proposed to go the ConocoPhillips refinery in Rodeo and to the Shell refinery in Martinez. DEIR, p. 3-28. This will allow Praxair the ability to import or export hydrogen from these refineries.

The hydrogen plant is responsible for the majority of the greenhouse gas emissions from the Project, according to the body of the DEIR, emitting up to 898,000 metric tons of carbon dioxide per year. DEIR, p. 4.3-40. This estimate may, however, be a substantial understatement: in an attachment to the Appendix which was not made publicly available at the City's website, like other documents, potential greenhouse gas emissions appear to be up to 1,961,592 million metric tons. *See* Appendix, Chevron Renewal Project, Greenhouse Gas Emissions Estimate Inventory. This number seems more realistic given that the upgrades to the hydrogen plant will result in increased functioning of at least 30 %, and possibly up to 55%, over current facilities. DEIR, p. 3-28. Moreover, the DEIR does not take into account the Project's production of GHGs other than carbon dioxide, such as nitrous oxides, methane and sulfur hexafluoride. It is also unclear whether the DEIR's current estimates include increases attributable to flaring events and whether the estimates account for the impact from the foreseeable Praxair Contra Costa County Hydrogen Pipeline.

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[17]221 Cal.App.3d 692, 720 [internal quotation omitted].

DEIR's Analysis of Greenhouse Gas Impacts

The DEIR provides a background on climate change, noting the international scientific consensus that human sources of GHG have contributed, and will continue to contribute to, global warming. DEIR, p. 4.3-8. It also lists some of the potential catastrophic impacts to California, including loss of snow pack, sea level rise, more extreme heat days per year, and high ozone days. *Id.* The DEIR identifies sources for California's total GHG emissions, noting that in 2004, California produced 492 million gross metric tons of carbon dioxide-equivalent greenhouse gas emissions and that industrial sources, including oil refining, are the source of 21% of the State's GHG emissions. *Id.*

The DEIR then discusses AB 32, noting that at the present time, there are no State rules or regulations in place that define a "significant" source of GHG emissions, and that there are no applicable facility-specific GHG emission limits or caps. Furthermore, the DEIR notes that the Bay Area Quality Management District ("BAAQMD") has not yet adopted regulations establishing thresholds to determine "significance" under CEQA for GHG emissions from industrial projects. DEIR, p. 4.3-38. The DEIR concludes that "it is not possible to draw conclusions about the significance of the Proposed Project impacts on global warming in the absence of established thresholds" and therefore the DEIR does not make any significance finding. DEIR, p. 2-7. Because the DEIR does not make a significance finding, the City does not recognize a requirement under CEQA to identify mitigation measures or alternatives to reduce or mitigate the increase in GHG emissions from this Project.

The DEIR Must Quantify the Project's GHG Emissions

The DEIR is not straightforward about the Project's likely emissions. The City does not specifically quantify Chevron's anticipated carbon dioxide emissions, but instead provides a broad range of possible emissions reflecting different levels of future refinery operations. DEIR, p. 4.3-40. The range varies from a low point of projecting a decrease in carbon dioxide emissions (-219,000 metric tons) to projecting an increase of 898,000 metric ton of carbon dioxide emissions at maximum operating potential. DEIR, p. 4.3-40. As discussed, a reasonable estimate of peak emissions may substantially exceed even this estimate.

This tactic is legally and factually inadequate. First, for CEQA's purposes, the City must analyze the emissions actually made possible by the Project – in this case hundreds of thousands of metric tons of carbon dioxide emissions – in order to accurately capture the environmental impacts of the refinery operating at its full permitted capacity. Operation of the expanded refinery at peak capacity is reasonably foreseeable and represents the potential environmental effects of the Project. *See San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 660 (EIR required to analyze impacts from peak levels of production).

Second, in spite of Chevron's claims, the potential for the refinery to operate at or near

full capacity in the future is high. Demand for hydrogen at refineries will increase substantially in the next few years as a result of amendments CARB proposed to the California Reformulated Gasoline Regulations that require reduction of the sulfur content of gasoline, in an effort to comply with Clean Air Act requirements to reduce ozone pollution. Reducing the sulfur content of gasoline is achieved by a process called hydrotreating, which requires large amounts of hydrogen. The DEIR states that the new hydrogen plant will boost hydrogen production capacity at the refinery by 30% and enable Chevron to meet California's fuel specifications. DEIR, p. 6-7.

Third, a CEQA notice was recently filed for preparation of an EIR for a 21-mile hydrogen pipeline - the Praxair Contra Costa Hydrogen Pipeline Project - to connect the Chevron Richmond refinery with two other Bay Area refineries (including Shell and ConocoPhillips), and enable the transfer of excess hydrogen among them. In the DEIR, the City discloses the plan for this pipeline, but does not disclose or evaluate the impact of this pipeline on the proposed Project or vice versa. It is unclear which refinery will be a net producer of hydrogen and which will be a net importer. The City does not disclose or analyze the pipeline's impact on Chevron's operations although it is likely that such a project by providing a link to other refineries will have an impact on Chevron's operations.

Other environmental review projects for contemporaneous refinery expansion projects have provided specific emissions estimates for GHGs. For example, in the ConocoPhillips Final Environmental Impact Report, Contra Costa County estimated that operation of the Project would produce 1,232,585 metric tons of carbon dioxide per year directly and another 19,049 metric tons per year from electricity use, for a total of 1,252,634 metric tons of carbon dioxide per year. (See Conoco FEIR, at 2-6.) Unless the City can provide some convincing reason, it must disclose the precise amount of carbon dioxide the Project will emit per year.

The DEIR Must Consider Global Warming Impacts

The Governor's Executive Order and AB 32 inform agencies' obligations under CEQA. The existence of global warming is indisputable; it is causing significant environmental impacts in California and will cause future catastrophic impacts if GHG emissions levels are not substantially reduced. Many incrementally small but cumulatively significant sources of emissions are being approved and permitted every day.

In an EIR, determining whether an impact is significant is an essential task: the finding triggers the lead agency's obligation to require feasible mitigation. Pub. Res. Code, § 21002.1, subd. (b). In declining to determine the significance of the Project's impact on global warming, the City argues that any such finding would be speculative since no regulatory agency has established a threshold by which to measure the significance of a single project's greenhouse gas emissions. This is erroneous because even if there is no established threshold in law or regulation, lead agencies are obligated by CEQA to determine significance. Neither CEQA, nor

the regulations, authorize reliance on the lack of an agency-adopted standard as the basis for determining that a project's potential cumulative impact is not significant.[18]

As discussed above, the requirements of AB 32 create a point of reference for determining significance. Because the State is committed to achieving a 25% decrease in GHG emissions, and must reduce GHG emissions by approximately 145 million tons by 2020, any project that produces large increases in GHG emissions is a clear obstacle to complying with AB 32 and should be considered a potentially significant cumulative impact. Even though the City correctly notes that the State has not yet adopted standards for GHG emissions, the Project's emissions are large enough that they should be considered cumulatively significant and feasible mitigation measures should be adopted. Moreover, given the huge amount of GHGs that will be emitted by the Project even under the City's less-than-thorough estimate, under CEQA, the Project would exceed any reasonable threshold for significance.

Approval of this Project alone would cancel out numerous greenhouse gas reduction measures proposed by CARB for entire industries and could account for as much new pollution as offset by hard won reduction measures for entire industries. (See Proposed Early Actions to Mitigate Climate Change in California, CARB, April 2007). For example, CARB proposes an early action measure that will reduce GHG emissions by 1-2 million metric tons by requiring professional servicing of motor vehicle air conditioning systems (*id*., p.7, Table 1). CARB also identifies numerous GHG reduction measures underway for 2007-2009 that are expected to achieve GHG reductions of 1 million metric tons *or less*, such as: manure management - 1 million; reducing venting/leaks from oil and gas systems -1 million; electrification of agricultural engines - 0.1 million; detection, repair, and recycling equipment for sulfur hexafluoride - 0.7 million; alternate chemicals in fire suppression systems - 0.1 million; and port electrification - 0.5 million. *Id*. p. 7-8, Table 2. Where the State is pursuing these reductions in an effort to comply with AB 32, an increase of 898,000 metric tons of carbon dioxide per year from one refinery must be considered significant.

For these reasons**,** the City must estimate the GHG emissions from its Project and adopt feasible measures to avoid or reduce those emissions. If the Project is carried out without implementing such measures, it will be more difficult for the State to achieve the required statewide GHG reductions and will place a greater burden on other sources of emissions (and may result in greater cost to achieve the required reductions). Allowing an agency to avoid CEQA's requirements related to mitigation simply by refusing to make a significance finding

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[18]Even if a project complies with a regulatory plan adopted to address a cumulative environmental problem, this cannot automatically support a finding that the cumulative impact of a project is not significant; an agency must still consider the evidence and circumstances and determine if the possible effects of the project, even with compliance the plan, are still cumulatively considerable. *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 114-116; Cal.Code Regs., tit. 14, § 15064, subd. (h)(2)).

would substantially undercut the law's "fundamental purpose," which is to ensure that environmental considerations play a significant role in governmental decision making.[19]

The City Must Mitigate the Project's Impacts

Because the global warming-related impacts of the Project are cumulatively significant, the City must discuss those impacts in the DEIR and "examine reasonable, feasible options for mitigating or avoiding the project's contribution" to the problem. Cal. Code Regs., tit. 14, § 15130, subd.(b)(5). This task is within the City's ability as the following examples briefly demonstrate.

First, the Project could reduce GHG emissions by developing energy efficiency measures or relying on alternative energy technologies. The Project could also reduce electricity use in the existing refinery operations which would decrease carbon dioxide emissions.

Additional mitigation may be available regarding the proposed hydrogen plant. For example, the DEIR must consider strategies to ensure that hydrogen is derived in the most environmentally-beneficial way and that greenhouse gas emissions are reduced. Because the production of hydrogen from fossil fuels is so carbon intensive, Chevron could consider a hydrogen plant that uses at least partially renewable sources to produce hydrogen. The California Hydrogen Blueprint Plan, Volume 2 (Cal/EPA May 2005) contains recommendations for successful commercialization of hydrogen in California. The recommendations include that: "The CA H2 Net should utilize 20 percent new renewable resources in the production of hydrogen for use in vehicles by 2010, and increase annually thereafter." (p.6)

Finally, if further reductions cannot be achieved on site, then the City could consider imposing additional off site mitigations on Chevron to offset the GHG increases of the Project. We note that AB 32 provides that CARB will give credit for voluntary GHG reductions that are undertaken before the regulations requiring specific GHG reductions are adopted. Health & Safety Code, § 38562, subd. (b)(2).

Additional Areas of Concern

DEIR's Analysis of Air Pollution Impacts is Inadequate

Volatile Organic Compounds

The DEIR also fails to address fully other air pollution impacts of the Project, including Volatile Organic Compounds ("VOCs"). VOCs are "[c]arbon-containing compounds that

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[19]*Fullerton Joint Union High School Dist. v. State Bd. of Education* (1982) 32 Cal.3d 779, 797.

evaporate into the air ... [and] contribute to the formation of smog and/or may themselves be toxic." DEIR, p 8-9. VOCs are a source of air pollution and have been identified as hazardous to human health. Bay Area Air Quality Management District, *Bay Area 2005 Ozone Strategy*, Vol. 1, Final-Adopted, January 4, 2006; AIRNOW, *Smog - Who does it hurt?*; Environmental Integrity Project, *Gaming the System: How Off-the-Books Industrial Upset Emissions Cheat the Public Out of Clean Air*, August 2004.

The DEIR states that "project-related VOC pollutant emissions [will] be significant and unavoidable." DEIR, p. 4.3-30. Based on the DEIR's own estimates, the Project will increase VOC emissions by more than twenty-six tons annually. DEIR, p. 4.3-33. The DEIR, concludes, however, that no mitigation measures are available because contemporaneous emission reduction offsets are not available to Chevron. DEIR, p. 4.3-36. [20] The DEIR does not identify any other mitigation measures that might reduce the emission of VOCs or explain why contemporaneous emission credits are the only feasible mitigation measure.[21]

Based only on the statements in the DEIR, it is not clear whether the City considered more than one mitigation measure to reduce the serious impacts of VOC emissions before deciding mitigation measures were unavailable. The DEIR fails to answer basic questions about VOC mitigation, including, for example, could any of the proposed replacement facilities be designed, built, or operated to reduce VOC and other emissions? The DEIR also does not discuss whether the hydrogen purity improvement component of the Project could be designed to reduce VOC emissions. Because Chevron is proposing to replace several existing facilities and because the Project is still in a draft planning stage, Chevron may be in the position to make operational or design changes to the Project that will result in lower emissions.

The DEIR does not address whether pressure relief devices ("PRDs"), which currently release VOCs directly to the atmosphere, could be routed to the proposed new hydrogen flare or any existing flare. According to a BAAQMD staff report, PRDs from the five bay area refineries emit an estimated average of 17.9 tons of VOCs annually. The DEIR does not address whether VOC mitigation opportunities exist locally, even if not specifically in relation to the proposed Project. Even if VOCs cannot be reduced for the Project itself, mitigation measures may be available to reduce VOCs elsewhere at the Chevron refinery or even nearby that would decrease the overall VOC emissions to the air.

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[20]If the City considered but rejected other mitigation measures, the DEIR should disclose such mitigation measures and the reasons they were rejected. Because VOCs are a threat to clean air and public health, the DEIR should explore all feasible mitigation measures that would reduce the emission of VOCs from the Project.

[21]If the Project's increased VOC emissions will be accounted for in some other manner, such as the use of banked emission credits, the DEIR should explicitly say so.

The City's abbreviated discussion and rejection of one mitigation measure does not meet the requirements of CEQA. The alternatives and mitigation measures sections are "the core" of an EIR. *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564; *Los Angeles Unified School Dist. vs. City of Los Angeles* (1997) 58 Cal.App.4th 1019, 1029; Pub. Res Code § 21002. (CEQA mandates that "...[P]ublic agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects....") A mitigation measure is "feasible" if it is "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." Pub. Res. Code, §21061.1. The DEIR needs to present a more complete discussion of possibilities for mitigation or offset of the Project's increased VOC emissions.

Flaring

Flaring can be a significant source of air pollution at refineries, emitting carbon monoxide, VOCs, sulfur dioxide, nitrogen oxide and other chemicals. Environmental Integrity Project, *Gaming the System: How Off-the-Books Industrial Upset Emissions Cheat the Public Out of Clean Air*, August 2004. Flaring can be reduced substantially if the proper equipment and processes are implemented. Other refineries, such as Shell, have reduced the number of flare episodes dramatically by making changes; therefore, it may be possible for Chevron to do so. EPA Enforcement Alert, *Frequent, Routine Flaring May Cause Excessive, Uncontrolled Sulfur Dioxide Releases*, Vol. 3, No. 9, October 2000; Communities for a Better Environment, *Flaring Prevention Measures*, April 2007.

The DEIR acknowledges that Chevron reported more flaring events in 2006 than in 2005. It attributes the increase to planned and controlled maintenance activities rather than unplanned process interruptions. DEIR, p. 4.1-13. The DEIR states that the Project could cause increases in the frequency and/or magnitude of flaring events at the refinery, but concludes that the impact would be less than significant. DEIR, p. 4.1-24. It does not explain how flaring increases could occur, nor identify the projected amount of flaring emissions for the entire Project[22] and why it would be less than significant. The DEIR also does not address if and how expanding the range of crude oil that can be processed at the refinery would impact flaring. It does not state whether replacement facilities or processes would or could be designed and operated to minimize flaring for both planned and unplanned releases. It simply states, "[b]ecause the Proposed Project would predominantly replace or upgrade existing facilities, the *expectation* is that it would cause minimal or no increase in relief system gas recovery load or flaring events." (emphasis added) DEIR, p. 4.1-14. The DEIR needs to state the basis for the "expectation" so that the public and

[22]The DEIR does estimate flaring emissions from the new hydrogen flare will result in emission increases of 4.85 tons per year, but does not identify if there will be other sources of flaring from the Project or identify if the 4.85 tons includes planned and/or upset flaring emissions.

decision-makers can evaluate the conclusion drawn by the DEIR.

The DEIR does not identify how Chevron plans to monitor, control, and minimize flare emissions from the operations of the Project. While the DEIR does state that a Flare Minimization Plan (FMP) update will be provided for each element of the Project, it fails to explain the Project's impact on flaring and whether such future plans would result in decreased, increased, or no change to flaring emissions. Even if the future FMP updates met the requirements of BAAQMD's Regulation 12, it may or may not meet the requirements of CEQA. At the very least, this issue needs clarification. Will the Project increase flaring or not? And what is the basis for the DEIR's conclusion. Once the impact of the emissions are more fully identified, consideration of alternatives and cumulative impacts may also be appropriate.

Conclusion

Global warming presents California with one of its greatest challenges. AB 32's target of reducing in-State greenhouse gas emissions to 1990 levels by 2020 cannot be met if steps are not taken now, where feasible, by local governments to reduce greenhouse gas emissions. Even though there is no rule or regulation in place from CARB that binds the City's actions, the City has the opportunity and the affirmative obligation under CEQA to begin addressing global warming in a constructive manner while educating the public and decision-makers. We request that the City not approve this Project unless these significant issues are addressed. Thank you for the opportunity to offer these comments. Any questions may be directed to the undersigned.

Sincerely,

/S/

JAMIE JEFFERSON
Deputy Attorney General

For EDMUND G. BROWN, JR.
Attorney General