

September 15, 2014

VIA ELECTRONIC MAIL
Amy Million, Principal Planner
Community Development Department
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Re: Comments on the Valero Crude by Rail Project Draft Environmental Impact Report, State Clearinghouse No. 2013052074

Dear Ms. Million:

Communities for a Better Environment (CBE) is a California nonprofit environmental health and justice organization with offices in Oakland and Huntington Park. CBE has extensive organizational experience in protecting and enhancing the environment and public health by reducing pollution and minimizing hazards from refinery operations.

The Center for Biological Diversity is a non-profit environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 675,000 members and e-activists throughout California and the western United States, including members that live and/or visit the vicinity of the proposed project. These comments are submitted on behalf of our board, staff and members.

As set forth below, the Valero Crude by Rail Project Draft Environmental Impact Report (DEIR) suffers from numerous deficiencies that render the document inadequate under the California Environmental Quality Act (CEQA) and the CEQA Guidelines. We respectfully request that the City reject the DEIR as an environmental review document, and defer approval of the Project until such time as the DEIR is revised to comply with CEQA.

An EIR is “the heart of CEQA.”¹ “The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment; to list ways in

¹ *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392 (“*Laurel Heights I*”).

which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.”² The EIR “is an environmental ‘alarm bell’ whose purpose is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return. The EIR is also intended ‘to demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.’ Because the EIR must be certified or rejected by public officials, it is a document of accountability.”³ The DEIR for the proposed Project fails entirely to live up to this mandate.

The DEIR suffers from several inadequacies predicated on two fundamental defects. (A) The DEIR fails to disclose the specific quality and characteristics of oil feedstock that the Project would enable Valero to process at its Benicia facility in relation to that of its current baseline feedstock; and (B) consequently, the DEIR fails to undertake any analysis whatsoever of the true range of environmental impacts caused by the change in crude slate enabled by the Project.

The DEIR, therefore, fails to:

- (1) provide a stable, accurate and detailed project description, thus undermining every aspect of the impacts analysis;
- (2) accurately evaluate numerous Project impacts, including air quality, greenhouse gas emissions, public health and safety, and biological resources;
- (3) provide sufficient analysis of cumulative impacts; and
- (4) adopt feasible mitigation measures.

For these and other reasons detailed herein, the DEIR is inadequate under CEQA. The City must revise the DEIR and recirculate it for public comment.

I. THE DEIR’S PROJECT DESCRIPTION IS INADEQUATE.

In order for an environmental document to adequately evaluate the environmental ramifications of a project, it must first provide a comprehensive description of the project itself. “An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR.”⁴ As a result, courts have found that, even if an EIR is adequate in all other respects, the use of a “truncated project concept” violates CEQA and mandates the conclusion that the lead agency did not proceed in a manner required by law.⁵

² Cal. Pub. Res. Code § 21061.

³ *Laurel Heights I*, 47 Cal.3d at 392 (citations omitted).

⁴ *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 730 (quoting *County of Inyo v. City of Los Angeles* (1977) 71 Cal. App. 3d 185, 193).

⁵ *Id.* at 730.

Furthermore, “[a]n accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity.”⁶ Thus, an inaccurate or incomplete project description renders the analysis of significant environmental impacts inherently unreliable. While extensive detail is not necessary, the law mandates that EIRs should describe proposed projects with sufficient detail and accuracy to permit informed decision-making.⁷ The DEIR’s Project Description fails to meet this standard in three respects: first, it fails to disclose a change to a different, perhaps even lower quality crude feedstock; second, it improperly relies on trade secret claims to withhold essential project information; and third, it fails to estimate and analyze impacts from the project’s duration.

A. The DEIR Fails to Fully Disclose a Switch to Lower-Quality Feedstock.

This Project will enable Valero to import and process tar sands crudes and Bakken crudes at its Benicia refinery. However, the DEIR fails to fully disclose this fundamental Project characteristic and consequently fails to analyze any associated and evidently significant impacts. The failure to disclose the types and chemical compositions of the new crude oils and the resultant potential impacts is a threshold issue and fundamental defect in environmental review.

Valero has made it clear throughout this CEQA process that it intends to use its proposed rail expansion to bring tar sands and Bakken crudes to the Refinery. In a public meeting in March, Don Cuffel, a manager of the Refinery Environmental Engineer Group, asserted that the Refinery could bring tar sands and Bakken crudes in via rail.⁸ The DEIR itself also states that “Valero may well purchase large amounts of light sweet North American crudes,” such as Bakken,⁹ and that Canadian tar sands are also an option.¹⁰

Additionally, Valero recently submitted an application to the Bay Area Air Quality Management District (BAAQMD) to bank Emission Reduction Credits (ERCs) at the Benicia Refinery for sulfur dioxide.¹¹ Valero submitted the application in late 2013 for 2,433.37 tons per year of SO₂. ERCs represent emission reductions achieved in the past, and which may be used in the future to offset emissions increases. If the Refinery

⁶ *Id.* (citation omitted).

⁷ See CEQA Guidelines [14 Cal. Code Reg.] §15124 (requirements of an EIR).

⁸ See, e.g., CBS SF Bay Area, Valero Admits Tar Sands Crude, Fracked Oil Could Come Through Benicia, <http://sanfrancisco.cbslocal.com/video/9980832-valero-admits-tar-sands-crude-fracked-oil-could-come-through-benicia/>; Donna Beth Weilenman, Long-awaited Valero crude-by-rail EIR delayed again, Benicia Herald, June 9, 2014, <http://beniciaheraldonline.com/how-to-get-a-copy-of-the-valero-crude-by-rail-eir-released-tuesday/>.

⁹ DEIR at C.2-1.

¹⁰ DEIR at C.1-1.

¹¹ The application and supporting materials may be found on the BAAQMD website at <http://www.baaqmd.gov/Divisions/Engineering/Public-Notices-on-Permits/2014/051114-24330/Valero-Refining-Company-California.aspx>.

were to process Canadian tar sands and other higher-sulfur crude oils, SO₂ emissions from the refinery processing equipment would increase, and the refinery would likely use those banked SO₂ ERCs to offset those emission increases. That Valero submitted this banking application as its rail project was undergoing CEQA review raises the suspicion that the application and the rail project are related, and supports Valero's previous statements that tar sands may be brought to the Refinery by rail. At the very least, the DEIR should have disclosed this ERC banking application, along with information about the impacts that the Project will have on refinery processing equipment and emissions, as discussed below in Part II.B.1.

An EIR for a refinery project is legally flawed if it does not disclose a planned change in crude oil feedstock. The Court of Appeal addressed this precise issue in *Communities for a Better Environment v. City of Richmond*.¹² In that case, the Court of Appeal found that the EIR prepared for an expansion of the Chevron refinery in Richmond was legally inadequate because the project description failed to disclose a crude switch.¹³ The court found that the "EIR's project description is inconsistent and obscure as to whether the Project enables the Refinery to process heavier crude."¹⁴

The same flaw is present here: though Valero has made it abundantly clear that it plans to bring in tar sands and Bakken crudes via rail, both in statements to the public¹⁵ and in the DEIR,¹⁶ the DEIR fails to disclose any of the details of its proposed crude import mix, instead claiming that regardless of which crudes the refinery processes, all emissions and environmental impacts of refinery processing equipment will remain at current levels, based on existing refinery activity.¹⁷ As the Court of Appeal found of the Chevron project, this DEIR's failure to disclose crude quality information renders the project description "inconsistent and obscure as to whether the Project enables the Refinery to process heavier crude."¹⁸

The failure to disclose crude feedstock information is a fatal flaw in this DEIR, and the document should be revised to include such information and recirculated.

B. The Project Improperly Relies on Trade Secret Claims to Withhold Key Project Information.

As discussed above, the DEIR does not disclose information about the quality and origin of the crude oils that it will import via rail and process. Valero has in fact withheld this information from the City, claiming as trade secret any and all information about the

¹² (2010) 184 Cal.App.4th 70, 89.

¹³ *Id.*

¹⁴ *Id.* at 89.

¹⁵ See *supra* note 8 and accompanying text.

¹⁶ See DEIR App. C.1, C.2.

¹⁷ See, e.g., *id.*

¹⁸ *Cmtys. for a Better Env't v. City of Richmond*, 184 Cal. App. 4th at 89.

types and properties of crude oils that Valero plans to purchase, has purchased in the past, plans to process, and has processed in the past.¹⁹

Information may be withheld as confidential business information under CEQA only if it meets the definition of trade secrets laid out in Government Code § 6254.7. That section defines trade secrets as information (such as formulas, plans, or processes) which is not patented, which is known only to certain individuals who are using the information to produce something of commercial value, and which gives the user a business advantage over competitors who do not know or use it.²⁰

As a preliminary matter, crude feedstock information is not trade secret. As demonstrated in detail in the technical comments of Greg Karras, crude quality information for the Valero refinery is not known only to certain individuals, but can be revealed through a reverse engineering process.²¹ Consequently, Valero's crude feedstock information is not secret, and cannot be claimed as trade secret under CEQA.

In order to support the claim that crude feedstocks are trade secret, the DEIR cites to a proposed rule issued by federal EPA about confidentiality required in EPA's Greenhouse Gas Reporting Rule.²² This proposed rule, however, is not relevant here, where we are concerned not with federal standards of confidential business information, or CBI classifications set forth in a reporting rule, but rather, with the California Government Code definition of trade secret. Additionally, the DEIR fails to cite to a final version of the proposed rule it cites.

Furthermore, even if Valero could properly claim crude feedstock information as trade secret under Government Cod § 6254.7, an EIR is legally deficient if its analysis relies upon confidential information that was not made available to the public and to decisionmakers.²³ "If . . . a project proponent can pick and choose who sees pertinent data—then a stake is driven into the 'heart of CEQA' by preventing the information necessary for an informed decision from reaching the decisionmakers and the public."²⁴ The DEIR should be revised and recirculated with all of the information claimed as trade secret disclosed in full.

¹⁹ DEIR at 1-5, App. D.

²⁰ Cal. Govt. Code § 6254.7(d).

²¹ Comments of Greg Karras on the Valero Crude by Rail DEIR, submitted Sept. 15, 2014 (hereinafter "Karras Comment").

²² DEIR at D-2, citing 75 Fed. Reg. 39,094 (July 7, 2010).

²³ *Cmtys. for a Better Env't v. City of Richmond*, 184 Cal. App. 4th at 88 (expert's "reliance on undisclosed data from Chevron does not meet the 'informational' goals of CEQA. CEQA requires full environmental disclosure, but Chevron apparently decided that the public and the decisionmakers did not need to see proprietary data given only to [the expert] and relied on by this expert").

²⁴ *Id.* (citations omitted).

C. The DEIR Fails to State a Project Duration.

The expected operational duration of a project is vital to any meaningful assessment of the potential environmental consequences of the project, by both decisionmakers and the public. It is impossible to identify, much less mitigate potential, and foreseeable impacts without information relating to the approximate or known duration of a proposed project's operational components. It is critical for an accurate, stable and finite project description.²⁵ The DEIR fails to meet this standard.

Although the DEIR includes a discussion of the Project's anticipated impacts in the context of construction and operation, the document omits identification of a precise duration of those Project phases, beyond the construction phase, which is identified as lasting approximately 25 weeks.²⁶ This Project implicates a potentially significant period of operation of the proposed rail car tracks and the resultant transport of a different quality and volatile crude feedstock up and down the West Coast. A legally sufficient project description must identify the anticipated duration of these activities.

II. THE DEIR'S ANALYSIS AND MITIGATION OF PROJECT IMPACTS IS INADEQUATE.

A. The DEIR Fails to Adequately Analyze and Mitigate the Project's Public Health Impacts.

As described throughout this Comment, and the additional technical comments including the Fox and Karras Comments, the DEIR fails to account for the change in crude slate enabled by the Project. By omitting this critical aspect of the Project, the DEIR's emissions analysis severely underestimates public health impacts. In order to effectuate the fundamental purpose of CEQA, it is critical that an EIR meaningfully inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made.²⁷ Only with a genuine, good faith disclosure of a proposed project's components, can a lead agency analyze the full range of potential impacts of the project, identify, and implement mitigation measures where necessary, prior to project approval.²⁸

Specifically, the Courts have held that CEQA requires disclosure of foreseeable changes in crude quality, and an analysis of any potential coinciding increase in

²⁵ See *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 193.

²⁶ DEIR at 4.9-10.

²⁷ *Laurel Heights Improvement Ass'n v. Regents of University of California* (1993) 6 Cal. 4th 1112, 1123 ("Laurel Heights II"); CEQA Guidelines § 15126.2(a) ("[a]n EIR shall identify and focus on the significant environmental effects of the proposed project") (emphasis added throughout).

²⁸ Pub. Res. Code § 21002 (public 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); Guidelines § 15126.4.

emissions from similar refinery expansion projects.²⁹ The DEIR's failure to disclose the Project's change in crude slate subsequently precludes any meaningful analysis of public health impacts of the Project. These include: increased air emissions from refining a lower quality oil feedstock; an increased risk of catastrophic failure as a result of the Project; an underestimation of other air emissions from the Project; and an inaccurate assessment of cumulative impacts as a result of the Project.

(1) The DEIR Fails to Identify or Mitigate Emissions Impacts Resulting from the Project's Change in Crude Slate.

The DEIR's analysis of air emissions for the Project is based on the inaccurate premise that emissions would not increase if "the average weight and sulfur content" of the projected crude slate remain within permitted operating limits.³⁰ That is simply not true. Further, the DEIR then attempts to shield its unsubstantiated analysis by suggesting that if "the crude blend processed became substantially heavier and more sulfurous, the resulting increase in emissions would be within the baseline for operational air quality impacts" previously approved by the City (for the VIP), and therefore, is not subject to review at this juncture. This also lacks any foundation, does not amount to substantial evidence, and is simply another attempt to diminish and obscure the significant impact of increased emissions of refining a lower quality oil feedstock, such as Canadian tar sands crude, or highly volatile, lighter-end crudes such as Bakken crudes.

The composition of tar sands crudes is chemically different from other heavy, locally sourced crudes, currently processed at the Valero Benicia Refinery. Tar sands crudes are distinct from even the heaviest of crudes currently processed at the Refinery for two reasons. First, the heavy feedstock requires large quantities of volatile diluent containing high levels of VOCs, TACs and HAPs. If released, these air pollutants amount to increased emissions that would result in significant public health and air quality impacts. The DEIR fails to address these impacts and should, at a minimum, include the amount of diluents needed to enable efficient delivery and transport of tar sands crude into and out of the Valero Benicia Refinery. These pollutants include potent carcinogens such as benzene, toxic sulfur compounds that would individually and cumulatively cause malodors, and degrade ambient air quality. Second, the high acid levels in these crudes and their semi-refined products would accelerate corrosion of refinery components, contributing to equipment failure, more accidental releases, and a greater threat to worker and public health and safety.

Despite these facts, the DEIR does not discuss the unique chemical composition of bitumen in tar sands. Bitumen is composed of higher molecular weight chemicals, including large amounts of benzene, toluene, xylenes, and other heavy metals. State and

²⁹ See *Laurel Heights I*, 47 Cal.3d. at 400 (quoting Pub. Resources Code § 21002.1(a); and CEQA Guidelines 15002(a)). See also *Cmtys. for a Better Env't v. City of Richmond*, 184 Cal. App. 4th at 89 (an "EIR must include foreseeable change in crude processed as part of environmental and impacts analysis").

³⁰ See DEIR at App. C.1.

federal toxic emissions inventories detail regulatory concern over these chemicals.³¹ Benzene has a high cancer potency and is known to cause severe reproductive, developmental and immune systems impacts at even low exposure levels.³² Systemic benzene poisoning, a long-term exposure risk, includes the potential for severe hemorrhages, and may at times result in fatality.³³ Concentrated, acute exposure levels have also been known to cause headaches, and nausea.³⁴ While less information is available relating to longer-term systemic and acute exposure levels to ethylbenzene, toluene and xylene, in California, the toxicity and risk levels of the three are currently under CARB scientific review.³⁵

The U.S. Geological Survey reports that “natural bitumen,” the source of all Canadian tar sands-derived oils, contains 102 times more copper, 21 times more vanadium, 11 times more sulfur, six times more nitrogen, 11 times more nickel, and 5 times more lead than conventional heavy crude oil, including even the heaviest of “American crudes.” The DEIR fails to discuss or disclose the environmental damage posed by these contaminants, which could include acid rain, harmful bioaccumulation of the contaminants, the formation of ground-level ozone and smog, visibility impairment, odor impacts affecting residents near the Refinery, accidental releases due to corrosion of refinery equipment, and depletion of soil nutrients – all of which have the potential to directly and indirectly impact public health.

Moreover, as explained in detail in Fox Comment, Bakken crude, which the DEIR does acknowledge is likely to be the primary crude involved in the Project, has its own, distinct health impacts as a result of its unique chemical composition. Bakken crude contains a high concentration of both Volatile and Reactive Organic Compounds (VOCs and ROGs respectively), and are highly volatile. As such, these crudes tend to increase the likelihood and risk of explosion in many activities including transport, loading, offloading, handling and storage, as explained in the section concerning hazards and accident risks. As a result, they can also lead to significant increases in emissions of chemicals, which also hold significant public health impacts. Indeed, Dr. Fox states that Bakken crudes have been known to have the highest concentrations of benzene among numerous crudes evaluated in Material Safety Data Sheets (MSDSs) submitted by a number of Valero’s competitors. As explained above, Benzene is a known human carcinogen that can lead to a range of acute and long-term adverse health effects and

³¹ See, e.g., United States EPA, Clean Air Act 1990 List of Hazardous Air Pollutants, available at: <http://www.epa.gov/ttn/atw/orig189.html>, last accessed on Jan 26, 2014; see also, California Air Resources Board Toxic Air Contaminant Identification List, available at: <http://www.arb.ca.gov/toxics/cattable.htm#Note 1>, last accessed on Jan 26, 2014.

³² Determination of Acute Reference Exposure Levels for Airborne Toxicants, March 1999, Acute Toxic Summary, BENZENE, available at: http://www.oehha.ca.gov/air/acute_rels/pdf/71432A.pdf, last accessed, Jan. 26, 2014.

³³ *Id.*

³⁴ *Id.*

³⁵ California Air Resources Board, Toxic Air Contaminant Identification List, available at: <http://www.arb.ca.gov/toxics/cattable.htm#Note 1>, last accessed, Jan. 26, 2014.

diseases, including cancer and adverse hematological, reproductive and development effects.³⁶

Finally, the DEIR's cursory reference to the prior VIP baseline determination to account for any emissions increase as a result of refining a lower quality oil feedstock provides nothing more than an illusory shield. Absent any quantification of such an anticipated increase in emissions, which as highlighted above is a foreseeable Project impact, the DEIR's analysis of air emissions due to a change in crude oil feedstock cannot meet CEQA's threshold substantial evidence standard. A switch in crude slate directly implicates additional operational emissions, which include HAPs and TACs, to be emitted at many components of the Project, and throughout the Refinery, including from train cars in their routine operation as well as from loading and un-loading at the Refinery, and through compressors, pumps, valves, fittings, and storage tanks, in far greater amounts than from the current baseline feedstock. Without providing any substantial evidence to the contrary, the DEIR must account for, analyze and mitigate these emissions, irrespective of any prior approval.

(2) The DEIR's Analysis Underestimates the Project's Emissions of Toxic Air Contaminant and Hazardous Air Pollutants.

As noted above, the DEIR fails to identify, analyze or mitigate known impacts that will result from the added presence of additional TACs and HAPs typically found in the crude blend that will be delivered, processed and transported as a result of this Project. Furthermore, the insufficient analysis of these pollutants is even based on an under-protective methodology.

Over the past few years, approval of Bay Area projects under BAAQMD's Health Risk Assessment (HRA) levels have spurred criticisms that those HRA standards fail to set adequate health protective standards. Many concerned residents, academics, and experts have criticized BAAQMD's existing HRA mandatory reduction threshold as being far too high to prove sufficiently health protective. BAAQMD, in fact uses the highest cancer risk reduction trigger for cancer risk posed by toxic emissions compared to any other Air District in the State.³⁷ For example, the South Coast Air Quality Management District sets its mandatory risk reduction level for toxic cancer risk at 25 in one million, while BAAQMD sets mandatory risk reduction level at 100 in one million. Recently, community pressure has highlighted this dramatic discrepancy and BAAQMD is currently in the process of revising its mandatory risk reduction levels to an acceptable

³⁶ CARB, Report to the Scientific Review Panel on Benzene, Prepared by the Staffs of The Air Resources Board and The Department of Health Services, November 27, 1984, Available at: <http://www.arb.ca.gov/toxics/id/summary/benzene.pdf>; Chronic Toxicity Summary: Benzene, Available at: http://www.oehha.org/air/chronic_rels/pdf/71432.pdf; World Health Organization, Exposure to Benzene: A Major Public Health Concern, Available at: <http://www.who.int/ipcs/features/benzene.pdf>.

³⁷ See, e.g., Science and Environmental Health Network Letter to Mayor and BAAQMD Board of Director member Tom Bates, dated May 4, 2009, Re: Bay Area Air Quality Management District Health Risk Reduction Measures Under Toxics Hot Spots Program, 1-4.

value.³⁸ Nevertheless, CEQA rests on the primary goal of identifying significant impacts.³⁹ The DEIR uses the existing, and least protective, BAAQMD HRA thresholds.⁴⁰ CEQA's requirement of identification of significant impacts requires the most accurate thresholds. The DEIR should be revised to, at a minimum, provide a revised analysis under thresholds that represent risk reduction at an acceptable value.

(3) The DEIR Underestimates the Risk of Catastrophic Failure.

A switch to a heavier oil feedstock necessarily implicates a greater risk of corrosion of refinery components.⁴¹ This greater risk of corrosion was identified as a root cause of the August 2012 fire at the Chevron Richmond Refinery that sent 15,000 residents to local hospitals.⁴² The DEIR's failure to adequately discuss the Project's shift to a lower quality oil feedstock precludes any similarly meaningful analysis with respect to both identification and mitigation of this similar risk of catastrophic failure and significant impact to public health.

Similarly, as Dr. Fox explains, a switch to lighter, more volatile crude, also carries with it an increased risk of catastrophic incidents and potential equipment failure. As stated above, the high concentration of both VOCs and ROGs present in Bakken crude, coupled with the crude's generally high vapor pressure and high volatility, increases the likelihood that highly dangerous emissions may be released from the transport, storage and handling of these crudes, as well as from potential accidents when they occur.

(4) The DEIR Fails to Identify or Mitigate Additional Impacts of Emissions Resulting from the Project's Change in Crude Slate.

The DEIR omits discussion of additional foreseeable Project emissions. These include emissions from: unloading feedstock from rail, displacement of feedstock pipeline supply (and therefore continued marine vessel supply), and an inaccurate evaluation of greenhouse gases (GHGs).

The DEIR provides that "the BAAQMD will consider locomotive emissions and tank car unloading emissions as may be caused by the Project."⁴³ This amounts to nothing more than a generalized goal of compliance, and therefore, inadequate deferred mitigation.⁴⁴ Unloading from railcars is a Project component - with associated emissions that must be analyzed and mitigated now.

³⁸ See BAAQMD Stationary Source Committee Meeting Agenda, Item 15, Health Risk Assessment Guidelines Revisions, Sept. 3, 2014, available at http://www.baaqmd.gov/~media/Files/Board%20of%20Directors/2014/brd_agenda_090314.ashx?la=en

³⁹ *Laurel Heights II*, 6 Cal. 4th 1123.

⁴⁰ See DEIR App. E.4.

⁴¹ See Fox Comments on Mitigated Negative Declaration of the Project.

⁴² See Chemical Safety Board, Chevron Richmond Refinery Interim Investigation Report, April 2013, available at: http://www.csb.gov/assets/1/19/Chevron_Interim_Report_Final_2013-04-17.pdf

⁴³ DEIR at 3-2.

⁴⁴ *Cmtys. for a Better Env't v. City of Richmond*, 184 Cal. App. 4th at 92.

In addition, as noted in CBE's comments, throughout its life, this Project will displace the dwindling California crude supplies currently delivered to the Refinery via pipeline.⁴⁵ At the same time, the DEIR provides a tit for tat analysis of emission reductions from marine vessel shipments to "displace" and account for emission increases from rail deliveries.⁴⁶ The DEIR ignores any displacement of pipeline inputs to the Refinery, inaccurately analyzing any displacement as displacement of *solely* marine vessel supply to the Refinery. Associated emission increases are also consequently ignored: displacing pipeline deliveries means that more marine vessel deliveries will continue, despite the Project, and will continue to cause ship emissions that the DEIR erroneously assumes are eliminated.

This is particularly problematic regarding GHGs. The DEIR's analysis of Project GHGs estimates an increase of approximately 18,433 metric tons of CO₂e per year. The analysis, however, decreases these new GHG emissions by 11,707 metric tons of CO₂e per year, claiming that Project rail shipments will displace marine vessel shipments at this amount.⁴⁷ This perceived reduction would leave Project GHG emissions below BAAQMD significance thresholds. Nevertheless, this perceived reduction is inaccurate, again plagued by the same exclusive tit for tat/rail for marine vessel displacement error. There is no exclusive displacement of marine vessel shipments; Project rail shipments will also eventually displace pipeline shipments – to what degree is uncertain, and the DEIR's analysis must be revised to remove any such uncertainty.

(5) The DEIR's Analysis of Cumulative Impacts to Public Health is Flawed.

An EIR must "demonstrate that the significant environmental impacts of the proposed project were adequately investigated[,] discussed[,] and ... considered in the full environmental context," including existing pollution burdens in the areas that are directly impacted by the Project.⁴⁸ The DEIR notes the Project's significant and unavoidable cumulative impact on Air Quality in the Sacramento Basin.⁴⁹ As noted above, this significant impact is even underestimated. The DEIR must be revised to account for the above underestimation of individual impacts to public health in order to properly determine any cumulative impact of the Project.

B. The DEIR Fails to Adequately Analyze and Mitigate the Project's Air Quality Impacts.

The EIR's analysis of the Project's air quality impacts is riddled with errors. We highlight five: first, the DEIR fails to disclose, analyze, and mitigate the impacts

⁴⁵ See Karras Comment.

⁴⁶ See DEIR at 4.1.

⁴⁷ DEIR at 4.6-12.

⁴⁸ CEQA Guidelines § 15125(c).

⁴⁹ DEIR at 4.1-23.

associated with a change in crude slate composition. Second, the DEIR's relies heavily on uncertain and unlikely reductions in marine shipment emissions to make a finding that air quality impacts in the Bay Area will be less than significant. Third, the DEIR's analysis is predicated on a faulty and illegal baseline. Fourth, the EIR completely underestimates indirect emissions. And fifth, the DEIR fails to propose feasible mitigation measures for significant air quality impacts that it has improperly found to be unavoidable.

The end result is that the Project will result in significant air quality impacts that the EIR fails to identify or mitigate.

(1) The DEIR Fails to Disclose and Analyze the Changes in Emissions from a Change in Crude Slate.

Perhaps the most fundamental and fatal deficiency of this DEIR deficiencies is its failure to provide any analysis whatsoever of the changes in emissions that might occur as a result of a modified crude slate. Though the DEIR analyzes air quality impacts associated with the transport of crude oil by rail, it fails to analyze impacts from existing, permitted refinery equipment, claiming simultaneously that these emissions will not increase, and that even if they did, they would not increase beyond permitted levels.⁵⁰ This argument is entirely illogical and contrary to the purpose of CEQA. CEQA requires an EIR to identify and analyze the significant environmental effects of a project.⁵¹ Even if an effect is found to be less than significant, an EIR must include a statement of the reasons why that effect was not found to be significant and therefore not discussed in detail in the EIR.⁵² In other words, there must be some preliminary analysis of the potential impacts, and an EIR cannot rely on conclusory statements to assert that an impact will not be significant.⁵³

The DEIR provides no such statement of reasons explaining why the air quality impacts from existing, permitted refinery equipment will not be significant, and instead simply asserts that emissions will not increase, because the refinery would have to blend any crudes it receives to match the slate it processes now.⁵⁴ Additionally, as discussed above in Part I.B, Valero has withheld all crude quality information as confidential business information, thus preventing the public and decisionmakers from having access to information essential to verifying the validity of the DEIR's statements that emissions will not exist beyond permitted levels. The DEIR cites to Appendices C.1 and C.2 to support its assertion that emissions will not increase at existing equipment, but these appendices provide no analytical support for those assertions, instead merely repeating the statements without providing further justification.

⁵⁰ DEIR at 4.1-11.

⁵¹ CEQA Guidelines. § 15126.

⁵² CEQA Guidelines § 15128.

⁵³ *See id.*

⁵⁴ DEIR at 4.1-11.

The DEIR does not indicate that any quantitative analysis whatsoever was done of the potential emission increases from a change in crude slate. The DEIR cannot simultaneously claim that there will be no such increase, but that even if there were, the increase would not cause emissions to exceed permitted levels, without first having analyzed the potential increases. To make such conclusory and contradictory statements without any supporting analysis is entirely contrary to CEQA's purpose of ensuring that the public and decisionmakers are fully informed about the potential impacts of a proposed project.⁵⁵

Additionally, the DEIR fails to fully analyze the air quality impacts associated with the transport by rail of tar sands and Bakken crudes. The DEIR dismisses any concerns about emission increases from a change in crude feedstock by noting that the refinery must blend crude oils to a specific API gravity and sulfur content range in order to process them in existing equipment.⁵⁶ However, many of the air quality impacts that would result from a change in crude feedstocks would occur *before* the crudes are blended for processing, and the DEIR fails to analyze those emissions.⁵⁷ VOC and TAC emissions are not related to the API gravity or sulfur content of crude oil (the factors for which the DEIR claims Valero's blending restricts), and what is more, those air contaminants are emitted before blending occurs. VOCs and TACs are primarily emitted during pipeline transport, rail unloading, and storage at tanks. The DEIR fails to analyze the potential impacts of a change in crude slate, and must be revised and recirculated to correct this deficiency.

(2) The DEIR Relies on Unreliable and Uncertain Emission Reductions from Reduced Marine Shipments.

The DEIR's air impacts analysis relies heavily on the assumption that the crude oil shipments by rail will displace a portion of the shipments currently received via marine vessel.⁵⁸ The DEIR argues that the emissions reductions associated with reduced marine shipments would exceed any emissions increases from the construction and operation of the crude by rail project, and that consequently the air quality impacts of the project are less than significant, and the net impact of the Project would be to reduce overall air pollution in the Bay Area.⁵⁹

The DEIR asserts that rail shipments would only displace marine shipments, and that "[c]rude oil delivered to the refinery by tank car would not displace crude oil delivered to the Refinery by pipeline."⁶⁰ However, there is no guarantee in the DEIR of

⁵⁵ See Cal. Pub. Res. Code § 21061 ("The purpose of an environmental impact report is to provide public agencies and the public in general with detailed information about the effect which a proposed project is likely to have on the environment.").

⁵⁶ See DEIR Appx C.1, C.2

⁵⁷ See Comments of Dr. Phyllis Fox on the Valero Crude by Rail DEIR, submitted Sept. 15, 2014 (hereinafter "Fox Comment").

⁵⁸ DEIR at 1-1.

⁵⁹ DEIR at 4.1-19

⁶⁰ DEIR at ES-3.

the level of reduction of marine shipments as a result of the project. The DEIR only asserts that *up to* 70,000 barrels per day of marine shipments *could* be displaced by the rail project.⁶¹ There is no guarantee that any level of marine shipment reduction would be enforced through a permit condition or other mechanism, and thus no guarantee that those emission reductions are permanent, or likely to occur at all.

In addition, it is highly improbable that crude by rail shipments will displace only marine shipments. As explained in detail in the technical comments of Greg Karras, the production of the California crudes that Valero receives via pipeline are declining and unlikely to remain at current levels.⁶² As those supplies decline, the volume of crude that Valero receives via pipeline is also likely to decline, which would require the refinery to receive more crude via marine shipment in order to make up the difference.

The reductions in emissions from marine transport are illusory, and the DEIR must be revised and recirculated to include an analysis of the more likely scenario, which should include an enforceable commitment to a certain level of emission reductions from reduced marine shipments.

(3) The DEIR Relies on an Incorrect Baseline.

The DEIR fails to establish an adequate baseline for its analysis of air quality impacts. The baseline is inadequate for two reasons: first, because it fails to demonstrate that its baseline is representative of emissions levels at the time that the Notice of Preparation was filed; and second, because the baseline is impermissibly set at the level of permitted emissions levels instead of actual emissions levels.

Establishing a baseline at the beginning of the CEQA process is a fundamental requirement so that changes brought about by a project can be seen in context and significant effects can be accurately identified.⁶³ When an EIR omits relevant baseline environmental information, the agency cannot make an informed assessment of the project's impacts.⁶⁴

(a) *The DEIR Uses the Wrong Timeframe for Establishing the Air Emissions Baseline.*

CEQA Guidelines state that the baseline for a particular project should consist of “the physical environmental conditions... as they exist *at the time the notice of preparation is published.*”⁶⁵ The City issued the Notice of Preparation for this Project EIR on August 13, 2013.⁶⁶ However, the DEIR uses an annual average of air emissions

⁶¹ DEIR at 1-1.

⁶² See Karras Comment; Fox Comment.

⁶³ *Save Our Peninsula Comm. v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th 99, 125 (baseline determination is the first rather than the last step in the environmental review process).

⁶⁴ *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.

⁶⁵ CEQA Guidelines § 15125(a).

⁶⁶ DEIR at 4.11-3.

from December 2009 to November 2012 to evaluate both air quality and greenhouse gas impacts related to the construction and operation of the rail facility.⁶⁷ The DEIR justifies this by arguing that three years averages are commonly used as the baseline in CEQA review of refinery modification project to accurately account for the cyclic nature of refinery emissions and operations.⁶⁸ While this may be valid, the DEIR clearly states that the end date of the baseline period, November 2012, is predicated on the applicant's filing of the Use Permit Application in December 2012—not, as required by CEQA, on the issuance of the Notice of Preparation.⁶⁹ Consequently, the project baseline estimate with an end date of November 2012 used by the DEIR is improper.

A valid project baseline would include the average conditions up to the point that the notice of preparation was published, in this case, August 2013. At the very least, the DEIR must demonstrate that the three-year average period relied upon is representative of emissions levels at the time the Notice of Preparation was published in August 2013. As it stands, the baseline is outdated, and the DEIR analyzes air quality impacts without informational background necessary to facilitate an accurate and reliable analysis. Because the DEIR fails to establish a valid emissions baseline, it is also fails in its overall goal to provide both the public and the decisionmaking agency with “detailed information about the effect which a proposed project is likely to have on the environment.”⁷⁰

(b) *The DEIR Impermissibly Uses Permitted Emissions Levels as the Baseline for Refinery Emissions.*

The DEIR completely fails to analyze any potential emissions increases from existing, permitted refinery equipment, and justifies this failure by arguing that any emissions increases from existing equipment would not exceed the baseline, because the baseline “would include emissions from the maximum operation of the Refinery equipment within permit limits.”⁷¹

This argument is both illogical and illegal under CEQA. How can the DEIR assert that emissions increases from permitted equipment will not exceed the baseline if the DEIR has provided no analysis whatsoever of those potential emission increases? Having refused to provide any information about potential increases the DEIR cannot then claim that those increases will not be significant. The DEIR must instead include an analysis of those potential increases, as discussed above in Part II.B.1.

In addition, the DEIR's claim that the relevant baseline is the permitted maximum emissions levels is clearly prohibited under CEQA, and the case that the DEIR cites to support this assertion, *Communities for a Better Environment v. South Coast Air Quality Management District*, in fact directly contradicts the DEIR's claim. In *CBE v. SCAQMD*,

⁶⁷ DEIR at 4.1-11, 4.6-8.

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ Cal. Pub. Res. Code § 21061.

⁷¹ DEIR at 4.1-11.

the Supreme Court rejected the Air District's argument that for a project employing existing equipment, the baseline should be the maximum permitted operating capacity of the equipment, even if the equipment is operating below those levels when the Notice of Preparation is issued.⁷² The Supreme Court rejected the District's illegal permit-based approach, and held that the baseline must consist of actual, existing levels of emissions, not hypothetical permit maximums.⁷³

The DEIR's pervasive use of permit limitations instead of actual emission levels to establish baseline air quality is a clear violation of CEQA. The DEIR cannot rely on a flawed definition of baseline conditions to essentially exempt itself from a meaningful analysis of potential emissions increases. If there is a concern that refinery emissions will increase from existing refinery equipment, then the DEIR must treat said increase as an impact of the project and adequately analyze its effects. Without such an analysis, the DEIR is incomplete, and fails to account for the true impacts of the project.

The DEIR uses an incorrect timeframe for baseline determination, and additionally uses hypothetical permit maximums, rather than actual emissions, to determine the baseline. These deficiencies mean that air emissions and greenhouse gas impacts in the DEIR are measured against an inaccurate and unrepresentative baseline. As it stands, the DEIR fails as an informational document, and the DEIR should be revised to correct these deficiencies and recirculated.

(4) The DEIR Fails to Analyze or Mitigate Indirect Emissions.

CEQA requires an EIR to consider both direct and indirect impacts of a proposed project.⁷⁴ Indirect impacts are those that are "caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable."⁷⁵ The scale of this Project's activities is large enough that off-site emissions could reasonably be affected. Moreover, the indirect nature of these wholly foreseeable off-site emissions cannot be ignored as "it is inaccurate and misleading to divide the project's air emissions analysis into on-site and secondary emissions for purposes of invoking the presumption the project will have no significant impact."⁷⁶ Thus, the DEIR requires a sufficient analysis and discussion of these sources. For example, in *North Coast Alliance*, the lead agency's analysis of the identification of indirect sources of GHG emissions from electrical demand was found sufficient given that the agency conducted a thorough analysis of the project's demand on a utility's electricity generation and whether it would increase production at any fossil-fuel power plants.⁷⁷

⁷² *Cmtys. for a Better Env't v. S. Coast Air Quality Mgmt. District* (2010) 48 Cal. 4th 310, 320.

⁷³ *Id.*

⁷⁴ CEQA Guidelines § 15358(a).

⁷⁵ *Id.* § 15358(a)(2).

⁷⁶ *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 717.

⁷⁷ *N. Coast Alliance v. Marin Mun. Water Dist. Bd. of Directors* (2013) 216 Cal.App.4th 614, 652 ("Based on this evidence, the EIR concluded the Project's energy demand would not result in an indirect increase in pollutant emissions.").

The DEIR does not acknowledge a switch to a lower or different quality crude feedstock and therefore does not address the indirect emissions associated with that switch, for example, greenhouse gas emissions from crude source demand activities such as extraction and front-end refining and diluting. The DEIR also utterly fails to propose mitigation measures for the indirect impacts associated with the transport of crude oil by rail, as discussed in further detail in the following section.

The DEIR must, at the least, identify these foreseeable activities and then adequately analyze and estimate how much the Project is likely to increase emissions from all of these sources, regardless of their location.

(5) The DEIR Impermissibly Fails to Mitigate Air Quality Impacts that it Improperly Identifies as “Significant and Unavoidable.”

The DEIR states that the Project will have significant and unavoidable impacts on air quality outside of the Bay Area Basin.⁷⁸ Specifically, the DEIR finds the emissions generated by the trains carry crude oil to the Refinery and returning to the oil fields in the northern United States and Canada would result in levels of NO_x emissions that exceed significance thresholds in the Sacramento Metropolitan Air Quality Management District (SMAQMD) and the Yolo-Solano Air Quality Management District (YSAQMD).⁷⁹ In YSAQMD, NO_x emissions due to the project would be three times greater than the significance threshold.⁸⁰

However, instead of identifying feasible mitigation measures for these significant impacts, as required by CEQA,⁸¹ the DEIR states that because the locomotives would be under the control of the Union Pacific Railroad and locomotive emissions are regulated by the federal government, “[t]he City has no jurisdiction to impose any emission controls on the tanker car locomotives; therefore, there is no feasible mitigation available to reduce this significant impact to a less-than-significant level.”⁸²

This is a misinterpretation of the intersection CEQA and ICCTA, and a complete abdication of the City’s responsibilities under CEQA. In support of its conclusion that all rail operations are preempted by federal law, the DEIR offers a four-paragraph summary of the ICCTA, and Appendix L, a three-page statement from Union Pacific Railroad.⁸³ UPR states that it “will not agree to any limitation on the volume of product that it ships or the frequency, route or configuration of such shipments,” because “[s]uch restrictions

⁷⁸ DEIR at 4.1-17 to -22.

⁷⁹ DEIR at 4.1-20, Table 4.1-6.

⁸⁰ DEIR at 4.1-20, Table 4.1-6 (YSAQMD significance threshold is 10 tons/yr of NO_x, while Project emissions would be 31.16 tons/yr).

⁸¹ CEQA Guidelines § 15126.4.

⁸² DEIR at 4.1-20.

⁸³ See DEIR at 3-26 to -27; App. L.

are clearly preempted under federal law.”⁸⁴ The DEIR states it more baldly: “ICCTA preempts state and local regulation.”⁸⁵

However, the California Court of Appeal recently found the opposite. “ICCTA does not preempt all state and local regulations.”⁸⁶ Generally, when the state regulations at issue are environmental regulations or similar exercises of police power related to public health or safety, the courts have found preemption only when the state regulations are discriminatory or unduly burdensome.⁸⁷

It therefore appears that states and towns may exercise traditional police powers over the development of railroad property, at least to the extent that the regulations protect public health and safety, are settled and defined, can be obeyed with reasonable certainty, entail no extended or open-ended delays, and can be approved (or rejected) without the exercise of discretion on subjective questions. Electrical, plumbing and fire codes, direct environmental regulations enacted for the protection of the public health and safety, and other generally applicable, non-discriminatory regulations and permit requirements would seem to withstand preemption.⁸⁸

Thus, while ICCTA may preempt some state laws and regulations, it is not a blanket preemption that applies to every state law or regulation that touches on railroads in any way. Notably, the DEIR does not cite any authority that supports the position that CEQA is preempted by ICCTA. The statements of federal preemption in the DEIR and its Appendix L are overly broad and simplistic, and fail to recognize the nuance in preemption questions, especially when state police power to protect the public health and safety are involved.

Even if the City were preempted from addressing any aspects of rail transport, it is certainly not preempted from taking measures to mitigate the emissions from rail transport. As SMAQMD noted in its August 26, 2014 comment letter on the DEIR, there are off-site mitigation measures that the City could require Valero to take which would mitigate the air quality impacts of rail transport outside of the Bay Area Basin.⁸⁹ Mitigation fee programs, such as the one SMAQMD references in its comment letter, are permissible under CEQA, and would enable Valero to mitigate the significant air quality impacts of its Project without affecting or regulating railroad transport in any way.

⁸⁴ DEIR at App. L, p. 1.

⁸⁵ DEIR at 3-26.

⁸⁶ *Town of Atheron v. Cal. High Speed Rail Auth.* (July 24, 2014, 3d Dist. Ct. App., Case No. C070877), p. 13 (publication pending, available at <http://www.courts.ca.gov/opinions/documents/C070877.PDF>).

⁸⁷ *Fayus Enters. v. BNSF Ry.* (D.C. Cir. 2010) 602 F.3d 444, 452.

⁸⁸ *Green Mountain R.R. Corp. v. Vermont* (2nd. Cir. 2005) 404 F.3d 638, 643 (citation omitted).

⁸⁹ Letter from SMAQMD to Amy Million, Principal Planner, City of Benicia, Aug. 26, 2014.

The DEIR's analysis has not satisfied the legal requirements under CEQA for significant and unavoidable impacts. Significant impacts are unavoidable if the lead agency finds that "[s]pecific economic, legal, social, technological, or other considerations, including the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures . . . identified in the final EIR."⁹⁰ Such a finding of unavoidability must "describe the specific reasons for rejected identified mitigation measures."⁹¹ In addition, to approve an EIR with significant and unavoidable impacts, the lead agency must also make a statement of overriding considerations explaining why the benefits of the project may outweigh the significant environment impacts.⁹²

Here, the DEIR skips the first step entirely by failing to identify any potential mitigation measures, when it is clear that such measures exist. Any finding that mitigation is infeasible would evidently be unsupported by substantial evidence on the record.⁹³ It is clear that the Project's significant air quality impacts are not, in fact, unavoidable, and the DEIR must be revised and recirculated to include feasible mitigation measures for these impacts.

C. The DEIR's Analyses of Risks of Accidents, Hazards, and Public Safety Impacts Resulting from the Project's Crude by Rail Shipments are Fatally Flawed

An EIR must provide sufficient information to evaluate all potentially significant impacts of a project, including public safety risks due to accidents, and must state "information about how adverse [an] adverse impact will be."⁹⁴ This information is critical to the public and agency decisionmakers as they evaluate the extent and severity of the Project's impacts, specifically as they relate public safety. The DEIR fails to meet this CEQA requirement in its analysis of potential Project hazards in three respects: (1) it continues to omit relevant and indispensable information regarding crude quality and, therefore, fails to provide an adequate assessment of resultant safety impacts, including those that may stem from routine transport and handling; (2) it applies flawed, unrealistic and under-estimated assumptions of the risks of oil spill(s) and other accidents with potentially devastating consequences; and (3) it illegally defers mitigation in relying on safety precautions and anticipated plans that are not yet enforceable.⁹⁵

⁹⁰ CEQA Guidelines § 15191(a)(3).

⁹¹ *Id.* § 15191(c).

⁹² *Id.* § 15193.

⁹³ *See id.* § 15193(b).

⁹⁴ *Santiago County Water Dist. v. County of Orange* (1981) 118 Cal. App. 818, 831.

⁹⁵ *See* DEIR at 4-7-8 - 10.

(1) The DEIR Fails to Account for a Change in Crude Transported to the Refinery in its Assessment of the Project's Increase in Hazards and Accident Risks.

While the DEIR acknowledges that the Project will involve changes to the Refinery's existing crude slate, it fails to identify, analyze, or mitigate the increased likelihood of accidents, and the increased risk of potentially catastrophic impacts caused by transporting, storing, and refining crudes with markedly distinct characteristics.

The comments submitted in response to the Initial Study and Negative Declaration (IS/ND) for the Project raised the issue of crude quality as it relates to both heavy, sour crude blends, like Western Canadian Select and other similar blends containing tar sands crudes, as well as lighter, high viscosity blends such as those sourced from other parts of North America including the North Dakota, Bakken shale region. The Fox Comment explains the DEIR's inadequate responses to comments to the IS/ND concerning crude quality in detail.

For the purpose of its hazards analysis, the DEIR fails to account for the change in crude slate in its assessment of the relative likelihood that hazardous incidents, or accidents causing spills and other forms of environmental and public safety impacts, will occur. The omission stands in stark contrast to much concern expressed by government agencies, media and the public, and to increasing amounts of data concerning the frequency with which accidents involving these types of crudes are occurring.

The Federal Railroad Administration, for example, has expressed concern about an increasing number of severe corrosion incidents found in rail tank cars and service equipment.⁹⁶ Incidents of derailments and explosions of hazardous materials along California rail routes specifically have also been known to cause extensive environmental damage in the past,⁹⁷ and recently, persistent and continued accidents involving crude transport by rail have garnered a significant amount of media attention.⁹⁸ Yet, the DEIR attempts to avoid analysis of the unique hazards accompanying the increased transport, handling, storage, and processing of both heavy, sour, tar sands crudes and lighter, more volatile crudes like Bakken, by stating throughout its analyses that the risks associated with a change in crude slate will be minimized as a result of full blending into the existing crude slate.⁹⁹

⁹⁶ See Letter from Thomas J. Herrmann, Acting Direct, Office of Safety Assurance and Compliance, Fed. Railroad Admin. To Jack Gerard, American Petroleum Institute, July 29, 2013, *available at* <http://www.fra.dot.gov/eLib/details/L04717>.

⁹⁷ For example, there was a very major spill into Upper Sacramento River in 1991. See Cal. Dep't of Fish & Wildlife, Cantara Loop/Dunsmuir Chemical Spill, <http://www.dfg.ca.gov/ospr/NRDA/Cantara.aspx> (last updated July 2, 2012).

⁹⁸ See, e.g., *Accidents Surge as Oil Industry Takes the Train*, New York Times, Jan. 25 2014, *available at* http://www.nytimes.com/2014/01/26/business/energy-environment/accidents-surge-as-oil-industry-takes-the-train.html?hp&_r=1.

⁹⁹ See, e.g., DEIR at 4.7-21 to -22.

The DEIR states that new, incoming crudes will be blended to match the composition of the current slate delivered to the refinery by ship and pipeline. The DEIR argues that because of this, the change in crude slate enabled by the Project has no bearing on the Project's potential impacts. Indeed, as explained, *supra*, in Part II.B.1, the DEIR improperly relies on the assumption that the Project's rail-imported crudes will be blended with other crudes to meet the same sulfur and weight specifications as the crude slate currently processed at the Refinery. According to the DEIR, the crude slate shift is thus adequately accounted for in the baseline assumptions of the document's analyses. While the blending of new crude with the existing slate is only minimally relevant to some issues regarding the *refining* of distinct crudes, the blending of these new crudes into the existing slate occurs only after the crude has been transported, stored and handled. Thus, regardless of whether there will be eventual blending of new crudes transported to the Refinery by way of the Project, the DEIR must analyze the full range of potential impacts stemming from the distinct crudes that will be transported to the Refinery by way of the Project.

As explained in detail in the Fox Comment, light-end crudes such as Bakken carry a specific set of hazardous implications as a result of their chemical composition and physical characteristics. Dr. Fox explains that Bakken and similar crudes tend to evaporate during transport and storage, creating pressurized conditions in both rail cars and storage tanks. Other crude terminals in the San Francisco Bay Area, including the Kinder Morgan crude terminal in Richmond, have required the use of pressurized tanker cars to unload rail cars carrying Bakken crude as they arrive to the terminal, for this very reason.¹⁰⁰ The much higher vapor pressure of Bakken crude oil also results in a rapid accumulation of vapors. In incidents of accidents, this often leads to larger explosions and flame accumulation causing large "fire balls" like the one created in the notorious Lac Megantic incident just a year ago, which do not otherwise typically occur with lower vapor pressure crudes. This phenomenon dramatically increases the relative significance of potential, hazardous impacts from the transport enabled by the Project and also increases the potential for devastating consequences when accidents involving this type of crude occur.

In the investigation of Lac Megantic accident in Canada, the Transportation and Safety Board (TSB) of Canada concluded that "the spilled crude oil had high vapour pressure and a low flash point."¹⁰¹ After careful analysis of the potential causes of the accident the TSB further concluded that the high volatility of the occurrence (Bakken) crude was "likely the major contributor[] to the large fire ball and pool fire" that caused a catastrophic level of damage to the surrounding area and is now what the incident has become so notorious for.¹⁰² Despite these, and other similar findings, however, the DEIR

¹⁰⁰ BAAQMD, 2nd Addendum, Engineering Evaluation Report, Kinder Morgan Materials Service, LLC, Plant No. 19225, Application No. 25180, December 2, 2013.

¹⁰¹ Fox Comment to Kern County, in re Alon Bakersfield Crude Flexibility Project, at 9.

¹⁰² Fox Comment to Kern County, in re Alon Bakersfield Crude Flexibility Project, at 9, citing TSB report, last modified on Aug. 19, 2014 at sections 3.5.6, 3.5., available at: <http://www.bst-tsb.gc.ca/eng/lab/rail/2013/lp1482013/LP1482013.asp>.

concludes, with little to no analysis, that the transport of the same crudes involved in this, and other, similar incidents result in less than significant impacts.

(2) The DEIR’s Analysis of the Project’s Potential Hazardous Impacts is Based on an Inappropriate Threshold Level of Significance.

The DEIR finds that the risk of an oil spill, accidental release(s) of emissions, and other accidents including train-car derailments and fires pose less than significant impacts on the environment.¹⁰³ In so doing, the DEIR ignores the potentially catastrophic consequences of these types of accidents, focusing almost exclusively on the alleged improbability of one occurring.¹⁰⁴ This analytic flaw renders the DEIR’s assessment incomplete, and incompatible with CEQA’s requirements.

CEQA requires that “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project” constitute a significant effect on the environment.¹⁰⁵ Notably, the Guidelines do not include “probability” as a consideration set forth in the evaluation of a potentially adverse change; rather, it is the potential magnitude and scope of harm that should be considered in determining whether an adverse change exists. The DEIR, nonetheless, applies a threshold of significance to measure risks to public safety based on its conclusions of *improbability* that accidents—including train-car derailments, spills or releases and other hazardous incidents—will occur.¹⁰⁶ For example, the DEIR offers assurances that oil spills and fires are highly unlikely, thereby concluding that the Project’s potential impacts relating to spills resulting from the Project are less than significant.¹⁰⁷ This conclusory assumption is not only problematic as a result of its violation of the CEQA standards set forth above, but it is also based on an erroneous estimation of the likelihood of potential hazards caused by accidents including oil spills and fires in and around the project area.

(3) The DEIR Applies an Unrealistic Assessment of Risks of Hazards From Potentially Catastrophic Train Car Accidents, Spills, and Other Incidents.

In its analysis of potential risks of hazards, accidents, and spills of over 100 gallons of oil, the DEIR makes reference to incidents like that which occurred in Lac Megantic in July 2013, and a handful of others. Despite listing three additional accidents occurring since the Lac Megantic incident occurred less than fifteen months ago, the DEIR erroneously concludes that there is a low probability that any accident, incident, or occurrence causing any damage or significant impact will occur. The DEIR implies,

¹⁰³ DEIR at 4.7-16 - 18.

¹⁰⁴ *Id.*

¹⁰⁵ CEQA Guidelines § 15382.

¹⁰⁶ *See generally* DEIR “Less than Significant” conclusions for all hazards impact categories, at 4.7-15 - to -27.

¹⁰⁷ DEIR at 4.7-16 - 18, 4.7-20.

moreover, that only those incidents causing 100 gallons or more of crude to spill merit consideration in the hazards analysis for the Project.

The DEIR's assumption that spills or other accidents resulting in the release of over 100 gallons of crude oil are likely to occur only once in every 111 years forms the primary basis for its conclusion that the Project's hazards impacts are less than significant. According to the data stated in Appendix F, this estimate is "conservative" and could actually be considered an overestimation; however, the DEIR describes three major accidents, all occurring within the span of less than year, and each involving significant amounts of oil spilled from tank cars and hundreds if not thousands of people including nearby residents being evacuated from their homes.¹⁰⁸ Indeed, the accidents that took place in Aliceville, Alabama, Casselton, North Dakota and Lynchburg, Virginia caused immense damage, and resulted in impacts that would certainly rise to the level of what would be considered "significant" environmental impacts under CEQA. The frequency with which these incidents occurred, and continue to occur, also appears to indicate that there is a higher likelihood that smaller, related incidents causing damage to the surrounding area could occur in less than 111 years. Moreover, while both the text of the DEIR, its analysis, and its attached appendices state a clear formula involving train car derailment data to reach the estimation of 1 accident every 111 years, that formula fails to include any variable regarding project duration, and omits any numerical assessment of the increase in hazardous substances and highly volatile, highly flammable crude material over time. Thus, notwithstanding even the "conservative" 111 year estimation stated in the DEIR, the potential for any accident or incident to involve such catastrophic impacts as those that have occurred in the past year, coupled with the absence of certain critical factors to be considered in determining the true likelihood of potential hazards, calls for more careful analysis in a redrafted and re-circulated document.

(4) The DEIR Fails to Consider the Full Range of Potential Hazards Resulting From Rail Proximity to Highly Flammable Refinery Operations.

As explained in the Karras Technical Comment, the DEIR does not quantify distances to existing Refinery storage tanks, and fails to discuss the proximity of the rail cars to other operational Refinery hazards. Indeed, the only mention the DEIR appears to make regarding rail car proximity to Refinery on-site hazardous materials is a statement that a spill containment berm for the Refinery's existing crude storage tanks would have to be relocated to make room for the Project.¹⁰⁹ This statement appears to show that DEIR at least indirectly concedes that the transported crude brought in on the Project rail-cars, via the existing rail route, will be transported, unloaded and handled in close

¹⁰⁸ DEIR at 4.7-7 to -8 (describing the Lac Megantic incident, the November 8, 2013 train derailment in Aliceville Alabama, the December 30, 2013 train collision in Casselton North Dakota, which derailed 34 train cars and caused massive explosions and fires, and the April 30, 2013 Lynchburg Virginia incident in which over 33,000 gallons of Bakken crude was released into the James River).

¹⁰⁹ See DEIR at 3-17.

proximity to hazardous materials; yet, the DEIR fails to actually identify the increased hazards resulting from this proximate location, much less analyze or mitigate those hazards.

In order to state an accurate assessment of potential Project impacts, and set forth required mitigation for those impacts, the DEIR must be redrafted and recirculated to provide clarity with regard to the proximity of the Project rail lines to highly flammable and hazardous Refinery operations.

(5) The DEIR Improperly Relies on Deferred Mitigation, and Applies a Misguided Analysis of Federal Preemption Principles.

Formulation of mitigation measures should not be deferred until some future time.¹¹⁰ Numerous cases illustrate that reliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking.¹¹¹

The DEIR here relies on the hope, or anticipation, that both federal and state agencies will implement stronger standards for tank car safety regulations and other safety precautions to ensure a lower accident risk, and emergency plans to minimize damage when accidents do occur. While the DEIR goes so far as to cite to some of these new, developing efforts, including those being developed by the Pipeline and Materials Safety Administration (PHMSA) and the American Association of Railroads (AAR), it fails to assure the public and agency decisionmakers that such efforts will lead to any legally enforceable standards, applicable to the Project. Moreover, in the event that such efforts do in fact materialize into legally enforceable requirements and/or standards, they are not legally enforceable at this time. Thus, to the extent the DEIR sets forth such efforts in the context of its required mitigation measures, they constitute deferred mitigation and as such, are prohibited under state law.

The DEIR's adoption of the UPR's position regarding federal preemption further undermines the document's ability to set forth meaningful mitigation measures. The DEIR takes the UPR's position that train movements are "preempted from local and state environmental regulations by federal law under the Interstate Commerce Commission Termination Act ("ICCTA") of 1995" The UPR uses this general principle to assert that it "will not agree to any limitation on the volume of product it ships, or the frequency or route configuration of such shipments."¹¹² The UPR goes on to cite case law precedent that supports a general prohibition against state interference in the sphere of rail regulations. While the UPR's statements regarding interstate commerce activity and preemption principles as applied to rail transportation regulation generally are accurate as over-arching legal principles, the ICCTA does not preempt CEQA, and there is no

¹¹⁰ CEQA Guidelines section 15126.4(a)(1)(b).

¹¹¹ See eg. *Cmtys. for a Better Env't v. City of Richmond*, 184 Cal.App.4th at 92.

¹¹² DEIR at App. L.

published decision that has so held.¹¹³ The UPR's recitation of Ninth Circuit holdings regarding permitting decisions such as the one involved in the *City of Auburn v. Surface Transportation Board*,¹¹⁴ are distinguishable both factually, and as a matter of law.

The courts have held that environmental regulation rises to the level of economic regulation when it entirely *prevents* the construction, operation and acquisition of a whole rail line, and that such economic regulation is prohibited. The courts have not held, however, that public disclosure and participation statutes aimed at providing the highest level of environmental protection in the construction and operation of a project involving rail lines, such as CEQA, are prohibited, or otherwise inapplicable as a result of general federalism principles. Accordingly, and as explained above in Section II.B.5, the DEIR cannot summarily rely on such blanket statements regarding general preemption principles, and must analyze and mitigate *all* hazard and public safety impacts created by the Project.

D. The DEIR's Analysis and Mitigation of Impacts to Wildlife Species and Biological Resources is Inadequate.

(1) The DEIR Fails to Sufficiently Disclose, Analyze and Mitigate the Project's Off-Site Impacts to Wildlife Species and Biological Resources.

The DEIR's analysis of the off-site impacts to wildlife species is deficient because it improperly limits its analysis to the Suisan Marsh area and bases its assessment of significant impacts on an inaccurate analysis of potential accidents and hazards; it provides inadequate mitigation to address some of the only potentially significant impacts it identifies; and it fails to disclose and analyze a number of train-related impacts to wildlife.

(a) *The DEIR's Analysis of the Relative Significance of the Project's Potential Hazards Impacts is Flawed.*

As described above in the discussion of hazards and accident risks, the DEIR fails to accurately account for the Project's significant hazard and accident impacts including the risks of oil spills and fires, and in fact cites back to its own flawed assessment of these risks in its analysis of offsite impacts on the Suisan Marsh area.¹¹⁵ The DEIR states that in relation to the potential for hazardous impacts to affect the Suisan Marsh area, the likelihood of an accident including a train car derailment or other incident causing 100 gallons of oil or more to spill, is even less likely. Indeed, with little to no additional analysis, the DEIR conclusively asserts that the likelihood of a large spill impacting this vulnerable location is 0.00381, or once every 262 years, rather than once every 111 years. This analysis is flawed for the same reasons as explained above in relation to the DEIR's

¹¹³ See also *supra* Part II.B.5.

¹¹⁴ 154 F.3d 1025.

¹¹⁵ DEIR at 4.2-31.

analysis of potential accidents, hazards, and potential spills and fires. The DEIR must be redrafted and recirculated to address these and other potential impacts particularly for such delicate and highly protected ecosystems and habitat areas such as the Suisun Marsh area.

(b) *The DEIR Fails to Disclose, Analyze or Mitigate the Full Range of Potential Impacts Resulting From Rail Activity Including Train Collisions, Noise Pollution, and Barriers to Movement.*

The Project tracks will traverse through the Suisun Marsh, the largest brackish marsh on the West Coast, and a delicate wildlife habitat. Despite the fact that the Project will drastically increase the amount of rail activity in this and other delicate habitats as train cars travel to and from the Refinery, the DEIR fails to sufficiently analyze the impacts of increased rail traffic to wildlife species along the rail lines. This is a severe deficiency, particularly because significant harm to species from train collisions, noise pollution, and barriers to movement has been scientifically documented, and these harms will worsen with increased rail activity over time. The DEIR should include a full discussion of the impacts of the Project's rail activity on biological resources, including the full range of potential impacts from rail activity, starting from the route origin and through the full route of the train trips, and in relation to the species and habitats present along all train routes. Currently, the DEIR only analyzes such information between the cities of Roseville and Benicia. The DEIR's complete failure to address these important topics violates CEQA.

(c) *The DEIR Fails to Analyze the Impacts of the Project's Rail Activity on Biological Resources and Protected Species.*

Scientific studies have documented that train activity impacts wildlife through (1) mortality from collisions with trains; (2) disturbance from noise and artificial light causing stress and behavioral changes; (3) impeding natural movements, thereby restricting the animal's range, making habitat less accessible, and potentially leading to population fragmentation and isolation; and (4) pollution of the physical, chemical, and biological environment, through, for example, the emissions of contaminants like heavy metals, which can degrade habitat suitability in a much wider zone than the width of the railroad itself.

(2) *The DEIR Fails to Sufficiently Analyze and Mitigate the Project's On-Site Impacts to Wildlife Species and Biological Resources.*

The DEIR underestimates the impacts the Project will have on wildlife in and immediately adjacent to the project site for three primary reasons. First, the DEIR limits its analysis of on-site project impacts to the Project's construction footprint, and therefore, the geographical area comprised of the immediate Project site and the Sulphur

Springs Creek as the indirect impact area. Second, in part because of the improper limit of the DEIR's analysis on the construction impacts of the Project, the DEIR sets forth inadequate mitigation to address the Project's significant impacts. Third as stated above and throughout this and other comments to the DEIR, the DEIR fails to account for increased chemical emissions and pollution caused by an increase in heavy metals, which degrade habitat suitability and cause potential hazards and accidents or other incidents causing severe environmental damage.¹¹⁶

(a) *The DEIR Improperly Limits its Analysis of On-Site Impacts to Construction Impacts From the Project.*

The DEIR fails to fully disclose and analyze the impacts from increased rail activity at the Project site to the numerous candidate, sensitive, and special status species identified in the document, including a variety of nesting birds in the Sulphur Springs corridor. For example, while the DEIR recognizes that the noise, vibrations, and visual disturbances associated with the construction phase of the project could have a substantial indirect effect on many nesting birds, it fails to analyze the continued visual disturbances, noise and barriers to movement caused by the project throughout its (undisclosed) duration, and continued operation. The DEIR further fails to analyze the Project's potential impacts from collisions, and pollution stemming from routine operations, transport and storage, as well as potential accidents including fires and oil spills. The DEIR must be revised and recirculated to explicitly identify and analyze the continued potential impacts from Project operations on migratory birds.

With regard to potential impacts on delicate and protected wetland species and habitats, the DEIR similarly improperly limits its analysis to the impacts that will result from construction only.¹¹⁷

The DEIR should be revised and recirculated to explicitly identify and analyze the continued potential impacts from Project operations, specifically from rail car trips, the handling, storage, loading and unloading of crude and potential accident risks on the surrounding extremely delicate and federally protected wetlands areas.

(b) *The DEIR's Proposed Mitigation Measures are Inadequate.*

The DEIR proposes to mitigate its on-site wildlife and habitat impacts by simply complying with its existing operational requirement including its storm water management plan, which also requires compliance with National Pollutant Emission Discharge (NPDES) standards. Moreover, in relation to its impacts on nesting bird

¹¹⁶ See Earthjustice Comment Letter to Kern County Board of Supervisors, September 8, 2014, in re The Final Environmental Impact Report on the Alon Bakersfield Refinery Crude Flexibility Project, at p. 23, (citing Jackson, S.D. 1999. Overview of transportation related wildlife problems, University of Massachusetts).

¹¹⁷ DEIR at 4.2-29.

species in the Sulphur Springs corridor, because the DEIR limits its analysis of those impacts to only the impacts that will stem from the construction phase of the project, the DEIR provides mitigation measures that also deal exclusively with the construction phase. For example, the DEIR states only that it will limit its construction activities to take place only during non-nesting seasons. This mitigation measure does nothing to address the continued impacts from the project's operation, rail activity, and handling, storage, loading and unloading of increasingly hazardous crudes.

E. The Project is Inconsistent with State and Local Plans.

An EIR must discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans.¹¹⁸ This necessarily includes the City of Benicia's General Plan and other applicable state and federal regulations.

Further, in order to provide such an adequate investigation and discussion of potential impacts of refining a lower quality oil feedstock as required by CEQA,¹¹⁹ it would be reasonable for decisionmakers to determine consistency with federal recommendations addressing the same shift in industry practice. The Project as proposed in the DEIR fails to meet such federal guidance. In addition, the Project as proposed also fails to meet the requirements of the City of Benicia General Plan and the State's GHG reduction goals.

As noted above, the U.S. Chemical Safety Board (CSB) has explicitly addressed the increased risks of corrosion in refineries due to refining a heavier oil feedstock. In particular, the CSB has identified the risk of catastrophic and hazardous failure from running higher sulfur crude in existing refineries built before 1985.¹²⁰ The CSB also found that such sulfur corrosion is not a new phenomenon, and that the petroleum industry is well aware of its potential to cause serious impacts on refinery equipment.¹²¹ The DEIR fails to recognize the CSB's analysis and fails to address any proposed recommendations made by the CSB. The DEIR in fact does the opposite. For instance, in response to this anticipated issue of corrosion, the DEIR's analysis provides two particular programs as mitigation: the management of change process (MOC) and the mechanical integrity program (MI).¹²² However, both the MOC and MI programs only provide a monitoring and response action. Such measures lack the element of prevention necessary to establish adequate responsive measures prior to the next potentially catastrophic incident. The DEIR should instead be revised to properly address similar and foreseeable issues of corrosion as identified at the Chevron Richmond Refinery, which led to the catastrophic August 2012 Chevron Richmond Refinery fire.¹²³

¹¹⁸ CEQA Guidelines § 15125(d).

¹¹⁹ CEQA Guidelines § 15125(c).

¹²⁰ See Chemical Safety Board, Chevron Richmond Refinery Interim Investigation Report, April 2013, available at: http://www.csb.gov/assets/1/19/Chevron_Interim_Report_Final_2013-04-17.pdf

¹²¹ *Id.*, at 15.

¹²² DEIR at 4.7-21.

¹²³ See Chemical Safety Board, Chevron Richmond Refinery Interim Investigation Report, April 2013, *supra*.

In addition, the Project as proposed does not meet the requirements of the City of Benicia General Plan. As noted in the DEIR, the City of Benicia General Plan includes specific policies to preserve and enhance existing development, including Policy 4.8.1, which requires evaluation of potential hazards and environmental risks to sensitive receptors before approving development.¹²⁴ By failing to disclose critical information regarding an anticipated switch in oil feedstock quality, a Project component that will determine air quality, hazard, and other public health impacts, the DEIR's analysis falls far short of meeting this City directive.

Finally, the Legislature has established that “[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.”¹²⁵ With AB 32, California has set its objective to meet 1990 emission levels of GHGs by 2020. The DEIR's analysis does not provide enough information regarding whether the Project will meet such a state priority. The DEIR suggests that the Project will have no significant impact on GHGs. The DEIR's conclusion, however, is based upon the overriding assumption that “to understand the Project's net impact on climate change, however, one must consider the maritime emissions that the Project would eliminate.”¹²⁶ That is precisely the problem: as highlighted throughout CBE's comments, the DEIR does not provide enough information regarding the exact marine vessel or pipeline supply displacements that the Project would cause. Therefore, any subsequent analysis of GHG impacts is also flawed. Although the DEIR includes a thorough discussion of California's regulatory framework to combat climate change,¹²⁷ without such a sufficient analysis, no decisionmaker can come to any sensible conclusion regarding how the impacts of this Project affect those goals.

III. THE DEIR FAILS TO ADEQUATELY ANALYZE THE PROJECT'S CUMULATIVE ENVIRONMENTAL IMPACTS FROM OTHER REFINING PROJECTS.

An EIR must discuss a Project's significant cumulative impacts.¹²⁸ A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable future projects whose impacts might compound or interrelate with those of the project at hand. “Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”¹²⁹

¹²⁴ See City of Benicia General Plan 4.8, and DEIR at 4.1-10.

¹²⁵ Assembly Bill (AB) 32, California Global Warming Solutions Act, Cal. Health & Safety Code § 38501(a).

¹²⁶ DEIR at 4.6-13.

¹²⁷ DEIR at 4.6

¹²⁸ CEQA Guidelines § 15130(a).

¹²⁹ *Id.* § 15355(b).

A project has a significant cumulative effect if it has an impact that is individually limited but “cumulatively considerable.”¹³⁰ “Cumulatively considerable” is defined as meaning that “the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”¹³¹ Cumulative impacts analysis is necessary because “environmental damage often occurs incrementally from a variety of small sources [that] appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact.”¹³² The DEIR fails to meet this requirement; for the following reasons, its analysis of cumulative impacts is incomplete, cursory and superficial.

Initially, the DEIR’s analysis does not comply with CEQA’s requirement that agencies first determine whether cumulative impacts to a resource are significant, and then to determine whether a project’s impacts are cumulatively considerable (*i.e.*, significant when considered in conjunction with other past, present and reasonably foreseeable projects).¹³³ The DEIR skips the first step and focuses only on the second.¹³⁴ This error caused the document to underestimate the significance of the Project’s cumulative impacts because it focused on the significance of the Project’s impacts on their own as opposed to considering them in the context of a cumulative set of impacts or problems. It is wholly inappropriate to end a cumulative analysis on account of a determination that a project’s individual contribution would be less than significant. Rather, this should constitute the beginning of the analysis.

Furthermore, it is important to acknowledge that climate change is the classic example of a cumulative effects problem; emissions from numerous sources combine to create the most pressing environmental and societal problem of our time.¹³⁵ As one appellate court recently held, “the greater the existing environmental problems are, the lower the threshold for treating a project’s contribution to cumulative impacts as significant.”¹³⁶

Canadian tar sands crude is considered to be the dirtiest, most carbon-intensive fuels on the planet. NASA climatologist Jim Hansen explains:

With today’s technology there are roughly 170 billion barrels of oil to be recovered in the tar sands, and an additional 1.63 trillion barrels of worth underground if

¹³⁰ *Id.* §§ 15065(a)(3), 15130(a).

¹³¹ *Id.* § 15065(a)(3).

¹³² *Cmtys. for a Better Env’t v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 114.

¹³³ CEQA Guidelines § 15064(h)(1).

¹³⁴ *See, e.g.*, DEIR at 5-5, 5-12 (ending cumulative impacts analysis after determining that the project’s impacts would be less than significant)

¹³⁵ *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 720 (“Perhaps the best example [of a cumulative impact] is air pollution, where thousands of relatively small sources of pollution cause serious a serious environmental health problem.”).

¹³⁶ *Cmtys. for Better Env’t v. Cal. Res. Agency*, 103 Cal.App.4th at 120.

every last bit of bitumen could be separated from sand. "The amount of CO₂ locked up in Alberta tar sands is enormous," notes mechanical engineer John Abraham of the University of Saint Thomas in Minnesota, another signer of the Keystone protest letter from scientists. "If we burn all the tar sand oil, the temperature rise, just from burning that tar sand, will be half of what we've already seen"—an estimated additional nearly 0.4 degree Celsius from Alberta alone.

Notwithstanding the clear evidence documenting the effect that petroleum refining has on GHG emissions, and enormous increase that would result from the transport, processing and refining of tar sands crudes. The DEIR should have acknowledged the switch to this different quality crude oil feedstock and provided a suitable cumulative impacts analysis.

IV. THE DEIR'S ANALYSIS OF ALTERNATIVES IS INADEQUATE.

The DEIR's alternatives analysis is inadequate because the DEIR fails to consider a reasonable range of alternatives and fails to identify an environmentally superior alternative. The DEIR must be revised and recirculated to correct these deficiencies.

An EIR is not considered complete unless it has considered a "reasonable range of potentially feasible alternatives" to a proposed project.¹³⁷ The feasibility of an alternative is determined 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."¹³⁸ An EIR's alternatives analysis is considered satisfactory as long as it contains "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project."¹³⁹ "The degree of specificity required in an EIR 'will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.'"¹⁴⁰ Therefore, an EIR must contain more details for a specific project than an EIR for an approval of a general plan.¹⁴¹

The DEIR fails to evaluate a reasonable range of alternatives and consider the alternatives in sufficient detail to allow a meaningful analysis and evaluation.¹⁴² The DEIR only analyzed four alternatives: a no project alternative, a reduced rail delivery alternative, a nighttime delivery alternative, and an off-site unloading alternative. The DEIR also identifies four other alternatives that were considered, but rejected because they were either not technically feasible, failed to attain the basic objectives of the

¹³⁷ CEQA Guidelines § 15126.6(a).

¹³⁸ Cal. Pub. Res. Code § 21061.1.

¹³⁹ CEQA Guidelines § 15126.6(d).

¹⁴⁰ *Al Larson Boat Shop, Inc. v. Bd. of Harbor Commrs.* (2d Dist. 1993) 18 Cal.App.4th 729, 746 (quoting CEQA Guidelines § 15146).

¹⁴¹ *See id.*

¹⁴² *See* CEQA Guidelines § 15126.6(d).

project, or would result in greater impacts than the proposed project. These rejected alternatives included two relocation alternatives for the tank car unloading racks, receiving crude from the WesPac Energy Pittsburg Terminal, and receiving the crude from the west side of the Refinery.¹⁴³

A. The DEIR Fails to Consider a Reasonable Range of Alternatives.

CEQA does not have an established legal standard for the scope of the alternatives considered, but courts have held the scope of the alternative “must be evaluated on its facts,” on a case-by-case basis.¹⁴⁴ The rule of reason judges the scope of the alternatives.¹⁴⁵

Parties objecting to the EIR are not responsible for formulating alternatives for consideration—the lead agency bears this burden.¹⁴⁶ Objecting parties will rarely have access to the same information that the lead agency does, and thus will be limited in their ability to suggest sufficiently detailed and specific alternatives.¹⁴⁷ The lead agency is in a better position to make these suggestions since they probably have greater access to information than the objecting parties.¹⁴⁸ However, the following discussion illustrates the inadequacy of the alternatives analysis contained in the DEIR.

The DEIR fails to consider an alternative that would avoid putting people in unnecessary danger during the transport of the volatile crude. The Project as proposed involves locomotives travelling through highly densely populated areas of central California, including Sacramento. This route exposes a large population to air emissions associated with locomotive operation, and greatly increases the human health and safety risks of potential accidents or spills. Along the route is the Sacramento-San Joaquin Delta. The delta is home to a number of native Californian species, used for major agricultural purposes in the state, and is a major water source for much of the state. A spill or train derailment in this area, of any magnitude, risks the health and safety of not only those in the surrounding area, but all over the state as well. The DEIR should analyze other potential routes that would avoid bringing volatile and highly flammable crude or semi-refined gas through highly populated areas.

Alternative modes of transporting crude oil from across North America should also be included in the revisions of the DEIR. The DEIR failed to include these and other reasonable alternatives in its analysis, and the document should be revised and recirculated to correct these deficiencies.

¹⁴³ DEIR at 6-4.

¹⁴⁴ *Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 566.

¹⁴⁵ CEQA Guidelines § 15126.6(a).

¹⁴⁶ *See Laurel Heights I*, 47 Cal.3d at 406.

¹⁴⁷ *Id.*

¹⁴⁸ *See id.*

B. The DEIR Fails to Consider Alternatives that Would Lessen the Significant Impacts of the Project.

Not only does the DEIR fail to examine a reasonable range of alternatives, the DEIR blatantly fails to consider alternatives that would avoid or substantially lower the significant impacts of the project.¹⁴⁹ The DEIR is unable to identify any of the alternatives as the environmentally superior alternative.¹⁵⁰

CEQA requires an EIR to identify alternatives that avoid or substantially lessen the significant environmental effects of the project.¹⁵¹ The DEIR identifies the reduced rail delivery as “environmentally superior to the Project in a few respects,” but then goes on to assert that this alternative is legally infeasible because of federal rail preemption, and that overall air quality would be better with the Project as proposed.¹⁵² How, then, is the reduced delivery alternative environmentally superior? The DEIR has not identified an environmentally superior alternative, it has merely restated the elements of the alternative without making any meaningful conclusions.

The purpose of CEQA is ignored by the DEIR’s failure to even entertain an alternative that addresses a significant reduction in the Project’s emissions. A range of reasonable alternatives must be identified in the components of an EIR “which would feasibly attain most of the basic objectives of the project *but would avoid or substantially lessen any of the significant effects of the project.*”¹⁵³ Of the few alternatives proposed in the DEIR, none of them succeed in reducing the impacts of the project. The DEIR must be revised and recirculated to correct this deficiency.

¹⁴⁹ See CEQA Guidelines § 15126(a).

¹⁵⁰ DEIR at 6-110.

¹⁵¹ CEQA Guidelines § 15126.6(c).

¹⁵² DEIR at 6-10.

¹⁵³ CEQA Guidelines § 15126.6(a) (emphasis added).

V. CONCLUSION

The DEIR remains woefully inadequate under CEQA. The City must substantially revise and recirculate the document in order to correct its numerous defects. We appreciate the opportunity to submit our initial comments on the DEIR and will submit further comments, if necessary, as soon as possible.

Sincerely,

/s/

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Roger Lin
On behalf of Communities for a Better Environment

Kassie Siegel
Director, Climate Law Institute
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