BENICIANS FOR A SAFE AND HEALTHY COMMUNITY RESPONSE
TO
DRAFT ENVIRONMENTAL IMPACT REPORT
FOR VALERO BENICIA CRUDE BY RAIL PROJECT
(SCH# 2013052074, USE PERMIT APPLICATION 12PLM-00063)
Dated: September 15, 2014

Benicians For a Safe and Healthy Community ("**BSHC**") respectfully submit this Response dated September 15, 2014 to the Draft Environmental Impact Report For Valero Benicia Crude By Rail Project ("**Response**"). Unless defined otherwise hereunder, capitalized terms and/acronyms used herein that are defined in the Draft Environmental Impact Report ("**DEIR**") will have the meaning given to such terms in the DEIR. The Response includes this written response together will all prior oral and written comments to the DEIR provided by BSHS to date. BSHC would like to thank the many individual members of BSHC who contributed to this Response. Follow-up consultation with BSHC and the City of Benicia's formal response to BSHC should be directed to Marilyn J. Bardet.

TABLE OF CONTENTS

SECTION	TITLE	Page
	PART I (general overview)	**2**
1	Summary List of Primary Failures of the DEIR under CEQA	**3**
2	Overview of the DEIR	**5**
	PART II (response to specific areas)	**57**
3	Fundamental Failures of the DEIR Analysis Involve Misstatements of the Law by the Applicant	**58**
4	Response to Sections 3.1-3.7 of the DEIR (PROJECT DESCRIPTION)	**63**
5	Response to Sections 4.1 and 5.4.3.1 of the DEIR (AIR QUALITY)	**80**
6	Response to Sections 4.5 and 5.4.3.5 of the DEIR (GEOLOGY AND SOILS)	**82**
7	Response to Sections 4.6 and 5.4.3.6 of the DEIR (GREENHOUSE GAS EMISSIONS)	**84**
8	Response to Sections 4.7 and 5.4.3.7 of the DEIR (HAZARDOUS MATERIALS)	**85**
9	Response to Sections 4.11 and 5.4.3.11 of the DEIR (TRANSPORTATION AND TRAFFIC)	**89**
10	Response to Sections 4.2 and 5.4.3.2 of the DEIR (BIOLOGICAL RESOURCES)	**99**
11	Response to Sections 4.10 and 5.4.3.10 of the DEIR (NOISE)	**113**
12	Insurance (Substantive Area of Risk Not Addressed in the DEIR)	**123**
13	General Requests For Information and Questions to the DEIR	**129**

PART I

General overview

Section 1	Summary List of Primary Failures of the DEIR under CEQA
Section 2	Overview of the DEIR

SECTION 1: SUMMARY LIST OF PRIMARY FAILURES OF THE DEIR UNDER CEQA

The DEIR fails to meet the basic, minimum CEQA criterion; namely, to disclose to decisionmakers and the public the significant environmental effects of the proposed Project.

In this Response, BSHC supports its conclusion and elaborates specifically on such failure. The DEIR fails to meet the minimum CEQA criterion in the following areas:

Project Description/Scope/Objectives are fatally flawed

- Fails to examine the full affected area – the area in which significant effects would occur either directly or indirectly as a result of the Project
- Even within the limited Project description, the DEIR fails to adequately provide accurate objectives, locations, characteristics, and scope of the project.
- Fails to identify the full "life" of the Project which may extend into decades if not perpetuity.
- Fails to provide applicable and accurate baselines.

Fails to provide sufficient information and data (e.g., compilation of and quantity of crudes/rail transportation variables) for decisionmakers and the public to verify DEIR conclusions inclusive of purported statistical examinations and projections.

Fails to identify "growth-inducing" impacts and economic/social impacts

Fails to address previous scoping criteria

Fails to provide clear English writing and organization, is rift with descriptive narrative and offers conclusory statements unsupported.

Findings of impacts, significance and mitigations offered are flawed

- The DEIR cannot determine findings of significance (or, non-significance) and/or incorporate mitigation factors to offset the direct, indirect and cumulative impacts because the project description and scope (list others) is inherently flawed. Reliance upon the flawed project description/scope/objectives and baseline skews all other following factors, analysis, and findings that rely upon this tainted base.
- The Project, even as narrowly defined in the DEIR, is conclusory and contains unsubstantiated analysis and statistics.
- The DEIR ignores cumulative factors both (i) cumulative factors within the Project and (ii) cumulative factors related to the Project.
- The DEIR fails to examine reasonably foreseeable impacts in the full environmental context.

Project Alternatives are not viable and/or legally enforceable

The absence of control over UPRR operations and logistics means that the Project Alternatives provided are not controllable or enforceable either legally or contractually. Therefore, the only viable alternative offered is the No Project Alternative. If the only viable alternative is the No Project Alternative, it must also be the Environmentally Superior Alternative since no other alternative offered is viable.

Applicant's and UPRR's assertion that Applicant, the City of Benicia, and the State of California have no authority to control the logistics and operations of UPPR means that any impact of the Project (direct, indirect, cumulative and/or significant) may not be mitigated and therefore any significant impacts associated with the Project outside the control of the Applicant, City of Benicia, and the State of California must remain "significant".

Impacts associated with the transport of the crudes via rail and this Project must be noted as "significant"- it is mandatory - because as clearly demonstrated in this Response the reasonably foreseeable events described would:

- Substantially degrade the quality of the environment
- Substantially reduce fish or wildlife habitat
- Cause fish or wildlife habitat to drop below self-sustaining levels
- Threaten to eliminate a plant of animal community
- Substantially reduce the numbers or range of a rate, threatened, or endangered species
- Achieve short-term goals to the disadvantage of long-term goals
- The Project, when viewed in connection with the past, current, and reasonably anticipated future projects, would have a significant cumulative effects, and
- The Project would have environmental effects that will directly or indirectly cause substantial adverse effects on human beings

In summary, revisions to and recirculation of the Draft EIR is required for the reason stated above and

- A significant, new environmental impact resulting from the project has been identified and/or a substantial increase in the severity of an environmental impact has been identified.
- The DEIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.
- The DEIR is not an objective, good-faith effort at full disclosure.
- The requirements of CEQA are not met and the conclusions are not supported by substantial evidence.

End of BSHC Section 1: Summary List of Primary Failures of the DEIR under CEQA

SECTION 2: OVERVIEW OF THE DEIR

TABLE OF CONTENTS

1. PURPOSES OF CEQA AND THE DRAFT EIR

2. DEIR ORGANIZATION IS MISLEADING AND DECEPTIVE; KEY DOCUMENTS MISSING OR ARE HARD TO LOCATE; LIMITED DESCRIPTIONS DO NOT PROVIDE FULL DISCLOSURE; SCOPING ISSUES NOT INCLUDED:

3. REGULATORY FRAMEWORKS – CHANGES THAT WOULD AFFECT DEIR EVALUATIONS OF IMPACTS

4. FEDERAL PREEMPTION – EFFECT ON PROJECT RAIL ACTIVITIES; RELATION BETWEEN UNION PACIFIC AND VALERO; EFFECT ON DEIR ANALYSES

5. EXECUTIVE SUMMARY, INTRODUCTION AND SUMMARY OF IMPACTS

6. PROJECT DESCRIPTION FAILURES [DEIR 3.1 – 3.7]

7. PUBLIC HEALTH AND PUBLIC SAFETY

8. CUMULATIVE IMPACTS – RAIL AND REFINING

9. SEVERITY OF RAIL DANGERS AND EMERGENCY RESPONSE

10. CONDITIONS IN THE BENICIA INDUSTRIAL PARK – EFFECTS OF THE PROJECT ON TRAFFIC HAZARDS AND LAND USE

11. COMPARING THE DEIR AND THE INITIAL STUDY – LITTLE DIFFERENCE

12. "BRINGING HOME" THE ADDED DAILY RISKS OF CRUDE-BY-RAIL AND IMPACTS ON GLOBAL WARMING

13. PROJECT ALTERNATIVES

14. THE ENVIRONMENTALLY SUPERIOR PROJECT AND THE DEIR'S CLAIM

1. PURPOSES OF CEQA AND THE DRAFT EIR

Purposes of a Draft EIR:

Under CEQA, the purpose of a Draft Environmental Impact Report is to inform the public and decision-makers of environmental consequences of a project before decisions are made.[1] A draft EIR must fully disclose to the public and decision-makers the scope and extent of a project and its actions and their adverse environmental consequences, to enable understanding and fair judgment of the direct and indirect, short-term, long-term, cumulative and unavoidable environmental impacts of a project, their extent and level of significance, and evaluation of the feasibility and effectiveness of mitigation and monitoring plans submitted as part of the document that aim to reduce or avoid those impacts identified as "significant."[2]

A draft EIR must analyze a project and its foreseeable adverse effects in meaningful contexts of local and regional import under current federal, state, and local laws and regulatory frameworks and provide the criteria used for determining the significance of impacts. Scoping Comments received by the Lead Agency must be clearly addressed within the draft EIR. Alternatives to the Project provided should be based on sound reasons whether or not they fulfill Project objectives, and should provide a range of options that could feasibly be implemented to avoid significant impacts. [CEQA Guidelines 15126.6(a) and (b)]. The draft EIR must also demonstrate that every effort has been made to address and resolve controversies involving reasonable arguments made with regard to any aspect of the Project's operations. "CEQA does not require technical perfection in an EIR but rather adequacy, completeness, and a good faith effort at full disclosure.(CEQA Guidelines 15003(1))"[3]

A draft EIR should be a "stand alone," well organized, complete document to serve decision-makers and the public as an efficient, reasonably sufficient resource for reviewing the Project. Thus, a concerned reader should not be burdened by having to consult multiple outside resources, materials and online research to gain necessary "background" to understand the full scope of the proposed project and to judge a draft report's risk assessments, evaluations of impacts and conclusions.

The requirement for "completeness" also entails that a draft EIR must present information coherently and be prepared as an objective, unbiased assessment of a project to address areas of concern and controversy that have been raised and discussed under Scoping.

[1] CEQA Deskbook, A Step-By-Step Guide on How to Comply with the California Environmental Quality Act, Third Edition; Ronald E Lass, Kenneth M Bogdan, Terry Rivasplata; Solano Press Books, Point Arena, CA, 2012; p.133

[2] CEQA Deskbook, p.133 - 143

[3] Ibid. p. 91

2. DEIR ORGANIZATION IS MISLEADING AND DECEPTIVE; KEY DOCUMENTS MISSING OR ARE HARD TO LOCATE; LIMITED DESCRIPTIONS DO NOT PROVIDE FULL DISCLOSURE; SCOPING ISSUES NOT INCLUDED:

a.) The VCBR Draft EIR is a deceptively incomplete, inaccurate representation of the Crude By Rail Project and its actions, and its organization and omissions contribute to its spectacular failures. A prime example: the federal Preemption Rule, which confers to Union Pacific Railroad Company total authority over rail activity of the Project, should be announced at the very beginning of the DEIR's Executive Summary since it frames and conditions all statements in the DEIR regarding Project rail operations, and makes clear that ultimate governing authority over rail transport rests with the U.S. Department of Transportation [DOT], which creates the rules and guidelines that regulate rail safety. The lack of discretionary authority of local jurisdictions to mitigate rail impacts is central to understanding the DEIR's terms, claims and conditions as presented regarding Project rail operations. Nowhere in the document is this fact made clear.

Nowhere in the DEIR is it made clear that Union Pacific is not a part of the Project Application, yet controls all Project-related rail logistics.

> Given how vitally important the Preemption Rule is to the Project's rail operations – for the Applicant, the City of Benicia, her residents, and communities all along UP rail lines – the DEIR's Executive Summary and Project Description obscure and mask UP's powerful role and ultimate authority. (See Response, Overview - 3, 4 & 5)

b.) A concerned reader who doesn't have time to read the whole Draft Report might only read the Executive Summary, Introduction and Chapter 2, Table 2-1, Summary of Impacts and Mitigation Measures. These three chapters reflect the failures of the Project Description and impact analysis that flow from an incomplete and inaccurate Project Description. The introductory chapters do not disclose the full scope of the Project and its actions (operations), its direct and indirect impacts, the degree of their significance, and mitigations that would reduce and/or avoid the harm they pose and the regulatory framework for assessing the Project.

The Executive Summary and Project Description fail to fully identify and describe Project Objectives, the Applicant's explicit and implicit aims and goals. A reader of the Report may not grasp that the Valero Crude By Rail Project is not simply a "rail logistics" operation as the DEIR portrays, reflecting the Applicant's first introduction of the Project in early 2013 – a characterization exemplified by the Executive Summary [ES.1 – 8] and Project Description [Chapter 3. 3.1 – 3.7].

For the Applicant, accessing and processing *price-advantaged* domestic and Canadian sourced crudes is the goal, and those "lower quality raw materials" [VIP DEIR 2002] are intended under the framework of the CBR Project to be accessed by *whatever means available* – rail, tanker, barge and pipeline. The only way to understand this implicit fact is to read between the lines of the DEIR.

Full disclosure of the range and future balance of transport options that would variably be deployed *under the framework of the Project* would disturb the crafted GHG calculations presented as an environmental benefit of the Project. The GHG calculations given in the DEIR are inaccurate, without factual basis, and are misleading.

FLEXIBILITY is a fundamental Valero Improvement Project [VIP] objective, which clearly would be the prevailing Project condition, to keep options open for transport means *and* ends. Within the framework of the Project, rail is only one means among three transport options that could serve to access North American sourced crudes. However, the DEIR makes it difficult for a reader to grasp the full extent of those "options" on balance: thus, how, when, why, under Project conditions, the Applicant would increase marine vessel deliveries for both domestic and Canadian unconventional crudes, including Bakken oil derived from North Dakota shale formations and Canadian tar sands dilbits, (diluted bitumen), for processing or perhaps for future export. (See Response - Overview 6 & 7).

c.) Project Alternatives [ES-5] should be reasonably feasible if they are to be considered at all. However, both Alternatives 1 & 2 as presented are not feasible, given Preemption, such that reviewing them is an exercise in futility. Alternative 3, posing use of an off-site rail terminal is misleading, failing to specifically account for two projects in planning stages (Port of Stockton and Bakersfield oil terminal) that could potentially serve the Project by marine vessel (barge) or rail. (New pipelines are also considered under the Contra Costa County Northern Waterfront Economic Development Initiative.)

d.) Key background documents essential to analysis of the Project and its total operations are not made available on CD: the VIP DEIR of 2002 and also, the VIP DEIR Addendum of 2008, were both prepared by ESA. There is no "hot link" to the City of Benicia website where they can be found. Both documents should be included in a revised DEIR. Together the VIP DEIR and Addendum describe what became a decade's long implementation of permitted Refinery expansion and upgrade projects and are vital to the VCBR Project evaluation. The documents are referenced in the DEIR's Project Description [3.3.2.1 Crude Oil Processing, p. 3-12] and are obviously cited for their importance to understanding Refinery capabilities and objectives under VIP. Other references to the VIP DEIR are found in the Scoping Report [CD-ONLY], with "page 776" providing the highest "search rank" using the search tool provided. There is no hot link at that page to the documents.

e.) About the CD supplied with the published DEIR: Its organization is not made clear in its Table of Contents and the search tool doesn't make it easier to locate items of interest. Any reader without access to a computer would not be able to consult "CD ONLY" Appendices' supporting materials and would be disadvantaged. The CD's Table of Contents, under "Appendices," does not indicate which among those listed are CD ONLY, although nearly half of them (8 of 18) are otherwise unavailable, including: Appendix A - Notice of Preparation/Initial Study; Appendix B - Scoping Report; Appendix I - The Transportation Impact Analysis; Appendix E.2 - Marine Vessel Criteria Pollutant and

GHG Baseline Emissions; Appendices E.3 & E.4 - Air Permit Applications, Feb. 2013 & Update #1 Nov. 2013; and Appendix E.6 - Updated Methodology for Assessment of Risk and PM2.5 Concentrations at Receptors Near Locomotive Tracks Near Fairfield.

Official expert comment letters and reports submitted on the IS/MND by the Natural Resources Defense Council, Goodman Group, and Phyllis Fox, Ph.d PE are found under "Appendix B. Scoping Report – CD ONLY." Yet these documents were not submitted as part of Scoping and would not be expected to be located in Appendix B. The CD's organizational problem appears to stem from the use of a facsimile page taken from the City of Benicia's website dated from 2013 as a table of contents for Appendix B, but this is not made clear. The website page, called "Crude By Rail Project" inventories everything that had been submitted to the City at a particular time. However, items listed are not hot-linked to actual letters and reports. The user has to scroll down through hundreds of pages, and the search tool "ranking" references to certain requested items lists "hits" without any specification as to where the actual item will be found. The search tool finds many references to the **Phyllis Fox Report** on numbers of pages of the public's comment letters found within Appendix B Scoping Report; but a reader would not guess that an actual full copy of the Fox Report, submitted on the IS/MND, would be found in a Scoping Report.

Both the Goodman Group Report and Phyllis Fox Report are highly important because they represent expert dissenting arguments regarding crudes likely to be imported by the Project and Air Quality issues. The two reports belong in published Appendices in the printed version of the DEIR. A revised DEIR should include the full reports in separate appendices, similarly as the McGovern Report, which was deemed deserving of its own Appendix K. The McGovern Report references the Fox Report.

Only by familiarity with the Fox Report would a reader realize that the DEIR's generalized refutation (dismissal) of certain key concerns are directed toward her comments on potential increases in Refinery air emissions and accidents owing to processing of North American-sourced crudes. Given its importance to the DEIR's own arguments and conclusions, the Fox Report should be included in its own Appendix (not buried inappropriately in the CD ONLY Appendix B Scoping Report.).The same for the Goodman Group Report, which supports the conclusions that both Bakken and Canadian tar sands would likely be candidates for import by the Project. For understanding the controversies that remain unresolved in the DEIR, it is essential to have these two reports as convenient references in the revised DEIR's printed Appendices

f.) Separate dedicated chapters for Public Safety and Public Health were called for in Scoping Comments and should have been included in the DEIR. [Appendix B-Scoping Report-CD ONLY, Bardet Scoping letter, p. 598].[4] Precedents for inclusion of separate

[4] From Appendix "Scoping Report Nov. 2013, Valero Crude By Rail Project. 1 Introduction. "Scoping is not conducted to resolve differences concerning the merits of a project or to anticipate the ultimate decision on a proposal. Rather, the purpose of scoping is to help ensure that a comprehensive and focused EIR will be prepared that provides a firm basis for the decision- making process. . . The scoping process provides the means to determine those issues that interested participants consider to be the

chapters exist in Valero Improvement Project DEIR, 2002, and the VIP DEIR Addendum, 2008. Those documents were both prepared by ESA. (Note: The Addendum was not required under CEQA to be circulated to the public because the document represented a lower level of review. The use of the Addendum was challenged by the Good Neighbor Steering Committee and a Settlement with Valero, called the Valero/Good Neighbor Steering Committee Settlement Agreement was achieved in 2008 and Amended in 2010 with the City of Benicia participating as a party to the Amended Settlement.)

Without dedicated chapters, the DEIR's treatment of these two areas of vital and serious public concern results in an obfuscating, confusing organization of the document as a whole [1.8 Organization of the Document]. Discussions related to public safety and health are peppered throughout the document, making it nearly impossible to understand the whole picture of what the DEIR is saying and not saying on these key subjects. Those safety and health risks associated to Project operations would be added to serious risks posed on a daily basis by the Refinery itself.

The City of Benicia General Plan contains a 40-page chapter entitled Community Health and Safety and includes among various subsections, Hazards and Response to Hazards. The DEIR should be organized to reflect the General Plan's emphasis on the vital importance of improving and enhancing public safety and public health for the community at large.

The omission of a dedicated chapter on Public Safety may have been calculated to avoid direct discussion of Preemption that leaves the City of Benicia without discretionary power to attempt to mitigate foreseeable rail impacts under CEQA that would be a concern of the General Plan. However, Preemption does not release the DEIR from its responsibility under CEQA to fully disclose and describe potential, foreseeable risks, hazards and impacts owing to Project operations and to evaluate their degree of significance and potential severity.

The same reasons may apply for the DEIR preparers' omission of a separate chapter on Public Health. For example: the DEIR states that information (names) that would specifically identify crudes to be imported by the Project, and/or pertinent specific properties and chemical characteristics that would further identify or characterize those crudes likely to be imported, are considered by the Applicant to be "proprietary" and "confidential business information" under trade secret law [Exec Summary 1.7 Confidential Business Information, p.1-4]. Those specific "properties" deemed by the DEIR to be "secrets" may in fact represent public health risks.

The job of the DEIR is to objectively disclose full and accurate information, whether or not its discussions support the Applicant's interests. The DEIR's assertions on Trade Secret protections wrongly interpret the law. (see this Response, Section 3)

Understanding the limits of trade secret law is vital to discussions of Project emissions increases that would likely result from a changed crude slate. Accepting the DEIR's

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principal areas for study and analysis." Every issue that has been raised that falls within the scope of CEQA during scoping will be addressed and or considered in the EIR."

position, a reader could believe that the DEIR's claim for Valero's protection of proprietary and confidential information related to its crude slate "blend" extends to specific characteristics of likely crudes to be imported and the names of specific crudes intended to be imported.

As stated above, the DEIR is not released from its obligation under CEQA to identify and specify potential impacts that could pose significant risks and harm: to public health and safety, local and regional air quality, sensitive lands, waters and populations from the points of origin of North American crudes along transport routes to Benicia – and the climate, under conditions of global warming.

g.) It is inexcusable that the DEIR does not provide supporting maps (current and historical) and photos of the Project Site, the so-called Project Area (variously and nebulously alluded to in the DEIR), thus, the whole area and particular locations that would be affected by Project operations, especially considering the economic importance of the Benicia Industrial and surrounding infrastructure assets directly related to the Park's viability and prominence for the City of Benicia, Solano County and the region generally (businesses, I-680, bridges, Port). Maps need to be provided that would clearly show UP's main tracks running through Suisun Marsh along Goodyear Rd.,[5] the switching locations for trains to enter the Industrial Park, and side line tracks and spurs within the Industrial Park where Project related train movements are likely to occur.

h.) An inadequate and inaccurate Transportation & Traffic Impact 4.11-5 claims the Project "would not conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities." The Significance is determined to be "Less than Significant" with no mitigation required. However, there are no specific projects, plans or programs that are named. A particularly curious omission, however, is the "Bus Hub" Project, for which the City Council recently voted to adopt an Initial Study that would allow creation of the new transit option for commuters in the Industrial Park just northeast of the intersection of the railroad crossing at Park Rd. and diagonally across from, and very close to, Valero's Eastern Headquarters building.

The Bus Hub project should be included in the printed Appendices of a revised DEIR. Although it appears that the transit project has been withdrawn from the City's website for consideration at this time, despite its suspension, the Bus Hub project could be pursued at any time in the near future in the timeframe of the VCBR Project. The planned Hub's immediate proximity to the Park Rd. rail crossing and to the Refinery makes it imperative that the DEIR address possible impacts that could affect the Hub's uses and the safety of its users.

[5] In comments submitted by M. Bardet on the Initial Study, photos were provided of flooding that occurred in February 2011 along UP's main tracks crossing Suisun Marsh area within the City of Benicia. The photos were taken along the rail route from the Refinery, and along Goodyear Rd. Several photos show a flooded unpaved access road called "Morrow Lane" that crosses the tracks, but as shown, is impassable, with sign posted saying "Flooded."

The Hub's Initial Study documents are pertinent to the VCBR DEIR review. A Google search found the City's original Notice of Preparation, Initial Study and supporting materials, including the Environmental Phase 1 Assessment produced by Crawford & Associates (Sacramento).[6] Its supportive materials include important maps that are part of the Hub's environmental assessment and they would be useful for evaluating Project impacts, since the historic and current maps are highly informative of conditions within the area, including the parameters of the 100-year flood plain that includes the area proposed for the rail terminal's offloading racks on Refinery property.

Reviewing the maps collected by Crawford & Associate for the Bus Hub Phase I assessment, we request that those maps and other essential maps for understanding the environmental conditions of the area be included in a revised DEIR.

i.) The Industrial Park is comprised of lands that were former properties of the U.S. Army's Benicia Arsenal. Very little testing, if any, (exception, lower Arsenal area) was accomplished under the F.U.D.S. Restoration Project [Formerly Used Defense Site], for former Arsenal properties. Right now, the Cal-EPA's Dept. of Toxic Substances Control is investigating air pollution from TCE plumes in the 50-Series Bldg Complex between Tyler and Jackson Streets. The DEIR must clarify what final reports were submitted to the City by the Army Corps and DTSC pertaining to potential hazards and pollution remaining on former Arsenal lands within the Benicia Industrial Park. Comprehensive reviews of existing conditions of the former defense site properties were done by Brown and Caldwell and Jacobs Engineering and substantiate that there are significant concerns throughout the Arsenal properties that have not been investigated and characterized, including munitions and/or chemicals and other wastes that could be found subsurface. The unresolved issues of the so-called Arsenal Cleanup need to be made clear in the VCBR DEIR. For example: a train derailment that causes a serious fire might affect the Refinery's nearby wastewater treatment system and ponds, which are located in the flood plain in an area as yet "uninvestigated" (as far as the public is aware), for potential hazards from former Army uses. During construction on Valero Property, two hand grenades were uncovered [See City of Benicia website, Arsenal Cleanup, "Key Documents"]. Arsenal cleanup issues that remain uncharacterized and/or unresolved are within the Project Area and within the so-called "blast zone" radius, the impact zone designated were a catastrophic fire/explosion to occur, a scenario that was dismissed in the DEIR, by speculation that the scenario was considered a "low risk." However, a recent rail accident in Seattle WA, which didn't cause injury or explosion speaks to an urban environment threatened by derailment of four tank cars out of 100 carrying explosive Bakken oil.[7]

[6] City of Benicia website, Bus Hub Project Initial Study and Phase I Assessment. http://www.ci.benicia.ca.us/vertical/sites/%7B3436CBED-6A58-4FEF-BFDF-5F9331215932%7D/uploads/Bus_Hub_Initial_Study_Appendices.pdf

[7] Reuters, "BNSF train carrying North Dakota oil derails in Seattle" – June 24, 2014. http://www.reuters.com/article/2014/07/24/us-usa-oil-derailment-idUSKBN0FT1VL20140724

3. REGULATORY FRAMEWORKS ARE CHANGING THAT WOULD AFFECT DEIR EVALUATIONS OF IMPACTS:

a.) The Project poses precedent-setting challenges under regulatory uncertainty**,** a case of complexity under CEQA review. Project operations involve both stationary and mobile sources of hazards, with potential for foreseeable accidents and impacts that could occur anywhere from the source of crude to the California state border, to Roseville and on to the Valero Benicia Refinery. Thus, Project logistics and operations have a very wide scope unaccounted for with any particularity of concern in the DEIR. The fact that there are only three rail routes into California, all three through treacherous mountains, crossing over rivers, near lakes and through drought-parched forests – all treasured scenic landscapes – and onward through both rural and urban communities, must be evaluated under an existing set of federal, state and regional regulations, all that fail to protect communities and the environment under the recent projection of a 25 fold increase in deliveries of crude oil by rail expected by 2016.[8]

Meanwhile, long-held Federal Preemption for Railroad companies, as well as laws protecting proprietary trade secrets, interstate and international commerce seemingly proscribe any local, regional or state to have much control to PREVENT rail accidents from happening anywhere the crude unit trains travel. Focus is inevitably shifted to the Department of Transportation [DOT] and its recent proposals for rule changes that would enhance rail safety measures, most of which remain unproven and debatable related to tank car safety, rail speed, etc.

Regulations at all levels pertaining especially to rail safety and air quality are currently undergoing significant review and rule-making processes, with draft proposals circulating that would indicate hope for greater cautions and more stringent policy to protect public safety and health, the environment and climate. Such changes would likely affect DEIR estimations of Project impacts, their significance and potential severity.

Although CEQA requires review of a project under current regulations, this fact doesn't preclude description and discussion of anticipated regulatory changes that could be in effect by 2016 and would possibly alter calculations of Project impacts. Percentage increases in local traffic were projected 30 years out in the Transportation Impact Analysis [Appendix I — CD ONLY]. Yet we know that AB32, the Global Warming Solutions Act of 2006, is aimed, with targets set at 2020 and 2050, to drive down vehicle miles traveled [VMT] locally, regionally and state-wide, which would certainly affect local traffic impacts in the Benicia Industrial Park that are estimated by the Transportation Impact Analysis. [Appendix 1.]

b.) Proposals for new regulations governing rail safety – **information not included:**

[8] "Oil by Rail Safety in California: Preliminary Findings and Recommendations," Report of the State of California Interagency Rail Safety Working Group, June 10, 2014.

Since the DEIR was published in June 2014, and released to the public June 17, one week later than had previously been announced, the Pipeline and Hazardous Materials Safety Administration [PHMSA], on July 23, 2014, released a new report, based on previously reported findings, about proposed new rule-making[9] that would intend to improve rail safety for transport of crude oil and flammable fossil fuels. In an Emergency Order released by DOT on May 7th 2014,[10] Bakken oil was officially declared an "imminent hazard," but despite the DOT warning, the DEIR does not mention the specific designation "imminent hazard." The omission of the stark warning suggests that the DEIR preparers were avoiding language that would further define the degree of hazard posed by Bakken oil, likely to be imported by the Project. Various California state agencies are engaged to consider the various federal recommendations to improve rail safety, and legislators state-wide are attempting to respond to growing public outcry from threatened communities to identify problems and improve rail safety generally for the transport of crude oil and flammable fuels.

At the last minute before the DEIR's promised release date of June 10th, the DEIR preparers extended the release by one week, which was explained by the City as allowing further work on the health risk assessment. Considering the extension of the release date to accommodate the HRA, why didn't ESA not chose during that extra week to expand the discussion of the rail hazard risks [Section 4.7 Hazards and Hazardous Materials] to include the State of California Interagency Rail Safety Working Group Report, called "Oil by Rail Safety in California," which was publicly issued June 10th?

Further, despite uncertainty surrounding DOT's pending rule changes – a rule not expected to be adopted before 2016-17 – the DEIR does not discuss the potential negative consequences of the current regulatory uncertainty surrounding transport of dangerous crudes by rail in its risk evaluations.

c.) It would appear that the Valero CBR Project Application (along with the other refinery and energy company expansion projects similarly planned at this time in the North Bay Area) was submitted as early as possible, in Dec 2012, not only to take advantage of the current volumes of price-advantaged Bakken and Canadian tar sands available, but also, in order that the Project would be reviewed under *current* regulations, before *anticipated, more stringent* regulations could be implemented and enforced.

This concern was reinforced by a statement made by Valero's special counsel on CEQA, Mr. John Flynn, who was directed to speak at the 11th hour at the Aug. 14th Planning Commission hearing presumably in order to address a resident's suggestion that the Project's CEQA review ought to be suspended until new regulations on rail safety that are expected to be promulgated by DOT would be in effect. Mr. Flynn made it clear that under

[9] DOT Federal Railroad Administration. Notice of Proposed Rulemaking and Advanced Notice of Proposed Rulemaking. July 23, 2014. Safety Action Plan for Hazardous Materials Safety | Federal Railroad Administration

[10] US Department of Transportation, declaration, May 7, 2014; Emergency Restriction/Prohibition Order OST-2014-0067 Emergency Order | Department of Transportation

CEQA, no delay or suspension of the Project's review could be invoked for the reason of DOT's future rule-making schedule.[11]

d.) There are also significant rule changes proposed under the rubric of a "Refinery Emissions Rule" which is presently being reviewed by the Bay Area Air Quality Management District [BAAQMD or "Air District"] and for which concerned community members from throughout the Bay Area are urging requirement for reporting *current* baseline emissions and for emissions reductions generally, especially PM2.5. Also, US-EPA is proposing new requirements for monitoring, reporting and reducing refinery emissions. Under current public review are US-EPA's proposals for monitoring at refinery fencelines, and reductions of refinery fugitive air emissions, including PM2.5. In the aggregate, these proposed changes for regulating refineries would be better protective of fenceline communities' health and safety as well improve regional air quality.

4. FEDERAL PREEMPTION EFFECTS AND THE DEIR'S FAILURE TO DISCLOSE:

a.) The DEIR's most obscured inconvenient truth is that the Project Proponent has no legal power or authority to control Project rail logistics. UP's federal authority preempts local, regional and state jurisdictional and discretionary powers to in *any way* directly limit or modify VCBR Project-related rail operations or mitigate risks and impacts that would foreseeably result from them. Hence, under CEQA, the City of Benicia cannot effectively legally and contractually compel Valero or UP to mitigate foreseeable Project-related rail impacts involving conditions pertaining to rail service, uses, maintenance and safety that would potentially and foreseeably pose harm to the environment and jeopardize public safety and public health.

The effect of Preemption on Valero and also the City of Benicia bears down hard on the DEIR's claims and assumptions regarding conditions of Project rail logistics and, therefore, renders suspect the validity and credibility of the DEIR itself. UP's authority conditions Project Objective 1 & 2 [ES-1], and Project Alternative 1, 2 & 3 [ES-5, Alternatives, p. ES-4 -7].

At Planning Commission hearings, July 10th and August 14th, special counsels for the City and Valero respectively testified to the withering effect of federal laws on requests for disclosure of corporate information deemed proprietary under trade secret law (see this Response, Section 3), and also about the effects of federal preemption for railroad companies on the discretionary authority vested in local government under CEQA.

At the second hearing, August 14th, Mr. John Flynn, special counsel for Valero underscored that the public's concern about rail safety lies beyond the scope of CEQA, since neither cities nor the state has discretionary authority to condition or mitigate impacts associated to rail movement and activity. Mr. Flynn's advice to the commissioners and the listening audience was to take legitimate public concerns regarding rail safety to the proper federal regulatory authority, the US Department of Transportation [DOT].[12] However, the DEIR

[11] See transcript of Mr. Flynn's testimony at Planning Commission hearing, Aug. 14, 2014.
[12] *Ibid*.

does not make this clear. Why? What Mr. Flynn said came in the form of a warning of Preemption's powers, but without any description of its effects.

We must presume that the Lead Agency understood the conditions of Preemption before the DEIR was published.

Has the City of Benicia as Lead Agency communicated rail safety concerns to DOT, as Mr. Flynn advised the public to do at the Aug 14th hearing? The City has had one year to decide whether this would be an important step to take in the name of protecting community safety. DOT is *right now* accepting public comment on their proposed new rule-making whose purported intent is to improve rail safety for transport of greater quantities of crude oil by rail. Would the DEIR impel our City and decision-makers to take such an aggressive action, possibly in consort with other uprail communities who have shown that they intend, in service to their communities, to do diligence and send comment letters to DOT?

b.) Federal Preemption confers to private RR companies exclusive authority to control all train movements, train scheduling and train composition (type of locomotives, freight cars, number of cars per train, volumes of product transported in a single train), train speed, train routes, maintenance, etc. The DEIR nowhere addresses the plausible consequences of Preemption.

The reader's first encounter of any reference to Preemption is unexpected, at the bottom of a brief description of Project Alternative 1 [ES-5]. **"UPRR has taken the position that..."** [ES-5]. Immediately the reader is referred to Appendix L, but Appendix L provides UP's Position Statement without any discussion or explanation of its potential effects.

Why was the Preemption Rule not presented *before* description of Valero's "requests" to UPRR about desirable train arrival and departure times? This is more than an organizational problem. It signals the lack of coherence generally in the whole presentation of the Project and its foreseeable consequences.

The DEIR obfuscates and downplays the serious implications of the federal Rule – a Rule which effectively releases UP from having to comply or cooperate, *for any reason*, with Valero's "requests" that would attempt to direct UP (pre-empt the exemption!) in the case of any circumstances that would require that UP change the requested daily schedule preferred by Valero. The DEIR preparers, however, apparently assume or desire to convey that UP would do what it is asked to do, e.g. "take direction," and that UP's compliance with Valero's wishes is expected: for example, that train deliveries be scheduled *after* peak traffic times in the evening – presumably to avoid the kinds of traffic problems that would further degrade existing traffic conditions at key industrial park intersections during peak hours. Where is any commitment from UP in writing that Valero's requests would be honored? It's our understanding that UP would not be required to provide written guarantees about train movements to the public.

The DEIR states that DOT regulates all rail activity, but it fails to explain the limiting impact on Valero's authority over its own Project. There is no discussion, not even deep in

the document, that would clarify the boundaries of authority, except for the UP Statement on Preemption in Appendix L. Why the burial of such vital information? Why no discussion of its contents? The only other reference to UP's Preemption power is located in the Project Description [3.7 Federal Preemption of Railroad Regulation, p 3-26, 3-27]. Again, the statement in the Description is at the end of the chapter, and amounts to a few sentences.

Appendix L does not state but implies that under Preemption, for the Project to "work" according to the DEIR's Project Description, Valero must rely and completely count on Union Pacific's ability to optimally control specific procedures, protocols and performance of all rail movements, train composition, scheduling, routing, and also, maintenance of trains, switches and tracks — all such activities that under federal regulation remain undisclosed to the public. Yet the DEIR's assumptions and claims cannot be trusted because of Preemption and the fact the public has no idea of any contractual relation between UPRR and Valero that would give absolute priority to Project-related crude trains scheduling and movements.

Valero managers stress that their job is to "manage risk," but the Refinery's safety awards earned according to OSHA's Star Site merit system for refinery operations has no bearing on rail transport of crude oil from crude sources to the Refinery.

Thus Union Pacific's role in governing Project operations off-site of Valero Refinery property, and indirectly "on-site," is critical to understanding Project rail logistics that are presumed "optimal" as presented in the DEIR; but the actual way in which the relation between UPRR and Valero would work on a daily basis is not revealed.

c.) It's important that the public understand that Union Pacific Railroad Co, [UP or UPRR] is not a part of the Valero Project Permit Application, nor can UPRR be considered in any legal sense a "partner" engaged with Valero's operation of the Project as the DEIR appears to contrive or disguise. However, the DEIR does not explicitly reveal the nature of the relationship of UPRR to Valero and the Project that would make clear the operational limitations posed by Preemption. On the contrary, the DEIR blurs the effects of Union Pacific's role in determining, limiting and conditioning Project operations and conditions. The DEIR fails to disclose the true nature and extent of Union Pacific's role in Project rail logistics.

These facts have a magnifying effect on any and all risks, actual and publicly perceived, associated to all Project-related rail activity on and off-site of the Refinery. This is discomforting information for the City of Benicia and community, the Benicia Industrial Park and many cities uprail, which might explain why DEIR preparers, in their seeming effort to project a benign "face value" perception of the Project as "Valero's Project," chose not to announce the Preemption Rule in a primary location in the first or second page of the Executive Summary.

d.) Are there special contractual arrangements between Valero Energy Corporation and Union Pacific Railroad? If so, where is the evidence? It is not in the DEIR. Yet, UP would appear to be the unnamed de facto partner of the VCBR Project.

What does the community of Benicia know about Union Pacific as a railroad company? About its performance history and current history of accidents and derailments? How many crude unit trains has UP operated since 2012? When and how often, locally or regionally, have Union Pacific managers stood before the public or made themselves available for questions, or opened their complete safety record for public scrutiny? What is UP required to report under federal DOT regulations? Must they report every derailment or accident? If not, what is the threshold for reporting "incidents" or accidents of any kind? How would the train derailment scenario that was provided by the DEIR rate as a UP accident with regard reporting requirements? Who takes immediate responsibility for reporting at the time an accident, major or minor, occurs? What role does the City of Benicia's fire department have in relation to Union Pacific in the event of a minor or major accident within Benicia city limits?

The DEIR only discusses UP's role in the most generic terms on Project operations. The DEIR does not provide evidence of UPRR's safety record, despite the fact that questions about UP's historical and recent performance have been raised in official public comments submitted on the Initial Study, as well as in Scoping Comments [DEIR CD, pages 604, 630, 615]. Why were those public comments not addressed in the DEIR?

The DEIR should present the most accurate and up-to-date information available, including methods and criteria for assigning degrees of severity of accidents and derailments involving liquid fossil fuels and other dangerous hazmat. Why does the DEIR not provide such discussion? Is accident reporting also considered "proprietary" and off limits with regard the public's right to know?

Whatever the federal reporting limits are, UP's accident record is important in order that the public be enabled to evaluate DEIR claims for the safety of the Project's rail operations. Are the Federal Railroad Administration's published records of derailment accurate? Do they reflect derailments involving Bakken crude that have happened in the last year?

e.) Recognizing the effects of federal Preemption is intrinsic to assessing the circumstances and conditions of the totality of Project-related rail operations and their foreseeably cumulative impacts to Benicia and to affected urban and rural populations and environments all along the UP rail routes that would service Project crude deliveries. The DEIR ignores and/or fails to identify potentially significant, cumulatively considerable and unavoidable direct and indirect impacts that could foreseeably occur anywhere along UP rails, from the Valero Benicia Refinery to the various (unnamed) sources of crudes to be imported by Valero under contract with specific suppliers.

The DEIR describes the 100 crude-loaded cars that would travel between Roseville and the Refinery each day as being assembled into two 50-car crude-loaded trains, with two "empty" 50-car trains departing Benicia for return to Roseville. However, this scenario is

presented in the DEIR as if it were "set" by contract and legally defensible, but the reader cannot assume this is possible under Preemption. *Actual* train configurations and arrival and departure times of trains carrying "hazmat" (crude oil) are not publicly announced and therefore any such suggestion of certainty is highly deceptive. Adding to cumulative effects and risks, there can be no guarantee under Preemption that such "preferred" scheduling arrangements as described by the DEIR would obtain on a predictably routine daily basis. Yet, the DEIR says nothing to qualify or dispel the reader's *expectation of certainty* of such conditions that Valero "would ask for." [p. ES-3, and Project Description, p.3-22] Those DEIR words, "would ask for," are keys to unlocking the DEIR's deception: by its organizational confusion and omissions of fact, the DEIR obscures the *uncertainty* surrounding and veiling any and all of its propositions for what can only be understood upon close reading to be "optimal" Project rail logistics, which the DEIR promotes as reliable.

The DEIR errs deceptively in asserting, "The trains *would not be scheduled* to arrive or depart between the hours of 6:00 AM – 9 AM or 6:00 PM – 9:00 PM weekdays." [Project Description, p. 3-1] (Italics our emphasis). A reader must infer: trains may not be *scheduled* to arrive or depart during peak commuter hours, but this is not the same as guaranteeing that trains would actually avoid those times.

Seemingly to defend its assertions, the DEIR claims UPPR's promises to comply with Valero requests and highlights UP's "on time" records for Amtrak passenger and freight trains:

> "UPPR has agreed to make all reasonable effort to comply with this [Valero's] request and therefore, it is expected that Valero's unit trains will avoid crossing Park Road during the commute hours." [Project Description. P. 3-22]
>
> "UPRR has demonstrated the ability to regularly meet passenger train schedules – the Capitol Corridor trains dispatched by UPRR are on time 97% of the time." [p.3-22]

The DEIR goes a few steps farther, essentially promoting UPRR, making speculative claims and assumptions unsupported by fact, that in any case, are undermined by effects of Preemption, however reassuring the statements are intended to sound to the public:

> "One can assume that UPRR will have little difficulty scheduling trains around a three hour window and a two hour window, given their success in meeting the much more precise one-minute schedules required by Capitol Corridor. Moreover, UPRR currently avoids dispatching freight trains during the commute hours in order to ensure that freight trains do not delay the Capitol Corridor passenger trains. Valero's requested schedule, therefore, is consistent with UPRR's existing practice for dispatching freight trains." [Project Description, p.3-22]

Regarding the DEIR's claims above, the reader finds no explanation or caveat that expresses the difference between scheduling and operating crude unit trains loaded with a

single volatile and flammable cargo – Bakken oil, or any other flammable fossil fuel liquid – and scheduling and operating mixed freight manifest trains hauling beer, corn syrup, tomato pulp and fruit juices. The DEIR projects ideal "timing windows" for crude train deliveries that would avoid traffic hours; yet the document says very little about operating crude trains to avoid rail hazards and risks to public safety and the environment. The rail hazards possible from the point of origin of the crude all the way to Benicia are not explored.

Heavy crude-loaded trains serving the Valero Project and also other clients of BNSF (currently Phillips 66, Kinder Morgan) as well as anticipated future clients, including oil terminal operators, would be endlessly cycling in round trips, requiring strict vigilance, regular track, rail crossings and bridge inspections, maintenance of tracks, locomotives and rail cars.

Those inspections or work orders for maintenance are not subject to local public scrutiny. Controversies within the rail industry are reported recently in the Washington Times[13] in an article that speaks of the big rail industries and federal regulators as a "closed culture" that resists new designs for parts replacements and other train maintenance – controversies and delays in producing safer technologies that might prevent accidents and derailments. Such information is not generally known or understood by the public, but it would be pertinent to risk analysis and the conclusions of the DEIR at this point in time.

Valero has no control over those operating and maintenance conditions, nor does the City of Benicia or any other city uprail threatened by the VCBR Project. The DEIR fails to make clear that communities, lacking any authority to control rail conditions, can expect the "unexpected" regarding Preemption's potentially unruly effect.

f.) Preemption itself becomes a legal "hazard" for communities that would seek to address local risks associated to rail transport of crude oil designated an "imminent hazard." Federal Preemption disenfranchises a community's right to protect itself from the serious hazards the rail industry poses in transporting crude oil by rail into population centers and through sensitive environs – a range of risks from minor to major, including catastrophic spills, fires and explosions.

g.) As the ESA preparers well knew, Project Alternative 1 was a red-herring floating belly up as presented: its only apparent usefulness as a proposed "option" was in its demise, to demonstrate a case example of illegality under Preemption. Such a covert organizational strategy for obscuring a critical piece of information is not befitting an environmental review meant to protect public safety, public health and the environment from significant and cumulative adverse impacts. The DEIR should be far less clever and more transparent and forthright in its presentation of restrictive effects of Preemption on the Lead Agency's discretionary powers.

[13] Washington Times, Sept. 8 2014 "AHERN: Rail industry blocking technology to prevent derailments." http://www.washingtontimes.com/news/2014/sep/8/ahernrail-industry-blocking-technology-prevent-der/?utm_source=RSS_Feed&utm_medium=RSS

h.) The DEIR thus obscures the hollowness of its own projected assumption that Valero would direct UP for "optimal scheduling" of Project crude unit trains. Yet, even if UP would *intend* to perfectly oblige Valero's requests for consistent "on time" scheduling, could such a 'request' always be met on any given day or night?

The Draft Report does not explore the myriad ways in which UP's control of rail activity would affect Project operations in the case that rail activity conditions are *not* optimal. Rather, the DEIR analyses consistently presume OPTIMAL CONDITIONS for UPRR performance: "on time" train arrivals and departures of four 50-car trains each day.

Certainly the DEIR speaks for the Applicant's desires by entertaining minimal or no train movement mishaps. For example, Traffic and Transportation impacts analyses, including the Transportation Impact Analysis report [Appendix I. CD-ONLY] are based on optimal scheduling conditions "asked for" by Valero.

Why is there is no discussion about foreseeable scheduling problems that would involve Project train delays at Roseville or anywhere else along the lines? UP problems involving other manifest freight trains on the same tracks? Accidents "uprail" that could lead to "poor conditions" day and night? What would be the possible effects on the uses of the Industrial Park, and also, ramifications of scheduling problems and delays affecting "uprail" communities under "poor" scheduling conditions?

What, for example, would be the timing of crude trains passing through Auburn, Roseville, Sacramento, Davis, Dixon, Vacaville, Fairfield and Suisun that would be destined for the Refinery during Valero's "requested" optimal arrival and departure windows for Benicia? And what would be the timing of trains that would be traveling into California on their way to Roseville? What impact on rural and populated urban centers, from the border to Benicia, would there be if optimal scheduling is thrown off by for any reason?

i.) There is no discussion of a *major* derailment occurring anywhere between UPRR's Roseville rail hub and the Benicia Refinery. The model of a minor accident involving several rail cars spilling 100 gallons of crude cannot stand comparison against foreseeable risk of major derailments involving much greater volumes of spilled tar sands or exploding Bakken. Perhaps if a major accident had been entertained, the calculator might have found a greater occurrence rate, at least more than the "once in 111 years" ascribed to a lesser threat (see this Response, Section 8, Hazards and Hazardous Materials).

The DEIR states that off-loading 50 tank cars could take between eight and ten hours. Problems could occur during off-loading. Why does the DEIR not discuss any wiggle room for missed schedules and train delays, and other time-sensitive problems on or off-site of Valero property? On the contrary, the DEIR discussion of optimal night-time "windows" for crude train arrivals gives the impression that the Project would work like a clock with Valero's invisible hand directing train movements and activities on and off-site. There's not more than a mention that UPRR's trains would be remotely controlled from UPRR's central operations in Omaha.

j.) Why does the DEIR not make the regulatory "limbo" clear under which "existing regulations" fail the safety test according to the Pipeline and Hazardous Materials Safety Administration [PHMSA], which agency advises DOT?[14] Meanwhile, as previously stated, there's plenty of evidence and well-vetted official predictions that by 2016, there would be a twenty-five fold increase in rail deliveries into California of North American-sourced unconventional crude oil in relation to all deliveries of crude oil into our state.[15]

The case can't be overstated that CPC-1232 tank cars, claimed by the DEIR to be better protective against puncture during derailment scenarios, and promised to be voluntarily purchased or leased by Valero for the Project, have not been officially proven "safer" even at any slower speed, including 40 mph being recommended by various agencies, both state and federal. What proof is there that CPC-1232's would be used exclusively by the Project? Would "Valero's 1232's" be assembled at the crude's point of origin? (see this Response, Section 8, Hazards and Hazardous Materials)

k.) The DEIR leans on Valero's "voluntary" commitment to purchase or lease safer CPC-1232 tank cars, but even if this were a firm deal, it is nowhere guaranteed that they would be used daily, from crude source to Roseville to the Refinery.

5. EXECUTIVE SUMMARY, INTRODUCTION AND SUMMARY OF IMPACTS:

a.) The Project is first presented in the Executive Summary [ES 18] and Chapter 1, Introduction [Introduction 1.2 – 1.6] followed by Table 2-1, Summary of Impacts and Mitigation Measures for the Valero Benicia Crude By Rail Project, which comprises Chapter 2. It must be assumed that the public and decision-makers who have little time to devote to studying the entire Report might only read these brief reviews, and in doing so, they might assume that the DEIR is accurate and complete. On the contrary, the Executive Summary, Introduction and Summary of Impacts fails to provide an accurate and complete summary account of the Project's full scope, either regarding rail activities or processing of the North American-sourced crudes likely to be imported. Rather, the DEIR attempts to assure a casual reader of its general appraisal – that there is little reason to be concerned about either the Project's rail or crude-processing activities. Its summary reviews conceal essential information pertinent to understanding the Project, its actions and potential and foreseeable consequences.

b.) The Executive Summary so narrowly outlines the Project's features that the Project's geographical boundaries cannot be known, except as located within Valero Refinery property, at the proposed site for three new rail spurs and two offloading racks. Without clarifying information, the DEIR misguides the reader regarding the Project's physical "reach" from Benicia to North American crude sources at their extraction sites. And even

[14] http://www.dot.gov/briefing-room/emergency-order U.S. Dept. of Transportation: Emergency Order Docket No. DOT-OST-2014-0067, updated May 7 2014.

[15] "Oil by Rail Safety in California: Preliminary Findings and Recommendations," Report of the State of California Interagency Rail Safety Working Group, June 10, 2014.

if that were surmised, the DEIR does not illumine how Valero as a client of UP would be involved in disputes over Project-related rail accidents occurring anywhere between those crude sources and UP's Roseville rail hub or between Roseville and the Refinery.

c.) The Preemption Rule's critical importance to understanding Project rail operations and their effects is obscured by the brevity of its several references and their unexpected placements in the Executive Summary, at the bottom of a brief account of Project Alternative 1 [p. ES-5], and in two sentences that end Chapter 3 [Project Description, p. 3-27], with UPRR's Statement on Preemption relegated to the last two pages of the DEIR print version, Appendix L. The DEIR's strategic minimizing of the importance of Preemption in the Executive Summary continues through the Project Description, thus creating a skewed and false image, especially about the Applicant's role in what is purported to be "the heart of the matter" of the Project: rail transport of crude oil.

There is no place in the entire Draft Report where Preemption's myriad potential consequences are identified and discussed. Neither the Executive Summary nor Project Description [Chapter 3] discusses the full brunt of UPRR authority and control in relation to the Applicant and the City of Benicia. Attorneys for both the City of Benicia and Valero were asked to speak about Preemption at two planning commission hearings – as if in tacit acknowledgement by both Lead Agency and Applicant that the DEIR had failed to do its job to adequately explain and emphasize UP's Preemption authority, and what it signifies under CEQA. However, neither the DEIR or the attorneys have clarified that Valero's "requests" for optimal train arrival and departure scheduling at off-peak hours, and the likelihood of those requests being daily met by UPRR without delays, are flatly speculative and presumptuous. Impact analyses of potential rail hazards based on such flimsy assumptions of "optimal" conditions cause the edifice of the Draft Report to begin to fall to pieces like a house of cards on shaky grounds.

Federal Preemption's effect on DEIR's account of adverse effects of Project:
The DEIR does not address the effect of Preemption on Project operations. Thus it appears by inference that the DEIR preparers' avoided that discussion as a way of narrowing the perspective by which the Project's reach and full scope of impacts and consequences might be presented. Further, while federal laws represent serious constraints on state and local jurisdictions to condition Project rail operations, it appears that the DEIR's referencing of these particular laws has provided excuse for the very limited disclosure of Project operational adverse effects and risks — e.g. justifying non-disclosure of those "specifics" without which decision-makers and the public cannot gain clear understanding and full measure of the adverse consequences of the "whole of the Project."

Alternative 1's suggested conditions (allowing only one 50-car) serve as a surprise "lesson" about the effects of Preemption, although a reader only learns the important fact encountering two startling sentences tucked at the bottom of that Alternative's brief description. The statement, which only alludes to the Rule's existence, is presented without emphasis (no formatting "call out," no italics, no bold) and could easily be missed or misunderstood:

> "UPPR has taken the position that any limitation on the volume of product shipped or the frequency, route, or configuration of such shipments is clearly preempted under federal law. UPPR has summarized its position in a statement set forth in Appendix L. thus, Alternative 1 may be legally infeasible." [p. ES-5.]

The reader is then directed to Appendix L, the last two pages of the DEIR, for a copy of the "Union Pacific Railroad Statement re: Preemption."

However, the vital significance of Preemption to Project rail operations is not explained; nor is Valero's relation to UP and Valero's limited authority in matters of rail logistics. The fact that Union Pacific is not a part of the Project Application is not stated. Why such avoidance of discussion? What is UP's role in the Project? The Executive Summary does not describe it.

What, if any, are the mandated powers or provisions for oversight of rail safety that are conferred by DOT to local, regional or state jurisdictions? What, if any, powers does the City of Benicia have that would address potential rail hazards posed by the Project's daily rail operations? Why are these questions not addressed in the DEIR's Executive Summary or Introduction in conjunction with explanations of Preemption? Omitting facts and ramifications of Preemption, the DEIR denies the public understanding of the Project's operational protocols and the limits of the City of Benicia to address them. The public is left to infer the meaning of the Rule's effects not only on the Benicia community and Benicia Industrial Park, but also, on local environs and all those potentially affected communities, waters and landscapes along the UP rail lines that would be serving the VCBR Project.

Throughout the document, rail activities under UP control are described in nebulous generalities. For example: The DEIR's facile claims made in the Executive Summary and in Chapter 3's Project Description regarding crude trains' arrival and departure times are based on assumptions of optimal conditions; the DEIR does not clarify that the Applicant has no control over any aspect of rail movement, etc., as stated in Appendix L. and there is no accounting of impacts that would be associated to train scheduling delays or any other impediment to optimal rail operations.

c.) Valero management often reassures the public, saying, "We manage risk," which they can take credit for doing when in fact they are processing crude safely. Valero's OSHA star facility awards for Refinery safety, however, do not bear on the problems and challenges of providing safety for rail operations and rail movement logistics on and off-site of Refinery property, for example, train movement switching operations in the vicinity of Bayshore Rd and Park Rd. Table 2-1's summary of impacts seems to say "no problems, trust Valero," albeit, the extraordinary daily risks posed by the Project's *rail* activities would not be "managed" by the Applicant, but by Union Pacific.

d.) The Executive Summary cites five Project Objectives without explanations, then basic features of the proposed rail terminal offloading racks on Refinery property and the number of trains and volume of oil to be imported by rail, *up to* 70,000 barrels per day,

and then alleges the positive effects resulting from substituting two 50-car train deliveries (and 2 empty trains' departures) per day replacing approximately 81% of ship deliveries. Why is Project Objective 2 so vague? Why does it not say the actual number of ship deliveries being replaced by rail deliveries?

The reader is given the approximate percentage of ship delivery reductions – 81% – but 81% of what number? The Executive Summary doesn't report the total current number of ship deliveries of crude projected to be reduced by 81% by the Project.

How many ships each week currently deliver crude oil to Valero's port? What is the volume of crude delivered by ship weekly? What is the total number of ships per year that would be reduced by 81% if the Project were permitted? Which types of "marine vessels" are counted as being part of that 81% reduction? Large tankers? Smaller vessels? Were ships counted that would be classified as ships *importing raw materials of any kind beside crude oil*? The Executive Summary does not say, and doesn't provide either the annual total of ship deliveries or the number of ships per week to be replaced by daily trains carrying "up to 70,000 barrels of oil per day."

The Project's proposed 81% reduction of ship deliveries of crude, promoted as a benefit of the Project, raises an important question that must be addressed in a revised DEIR regarding future port uses envisioned, reasonably foreseeable and "allowed for" under the rubric of the Project. Neither the Executive Summary or the Project Description [3.1 – 3.7] discusses future uses of the Valero port that could include *at any time in the near or distant future* the importation by marine vessels (tankers or barges) of various North American-sourced crudes including Canadian tar sands diluted bitumen, or for that matter, export of North American-sourced crudes or refined gasoline, jet fuel, etc. produced at the Valero Benicia Refinery (see this Response, Section 4).

e.) The Executive Summary's omission of direct discussion of GHG reductions owing to substitution of rail deliveries for ship deliveries is striking, considering the alleged reductions' importance to the DEIR's claim that the Project itself represents the "Environmentally Superior Alternative." What figures were used for the DEIR's calculations of GHG reductions?

The only mentions in the Executive Summary of GHG reduction benefits owing to the substitution of train deliveries for ship deliveries are made in brief descriptions of the No Project Alternative and Project Alternative 1 [ES-5]. The No Project Alternative is rejected partly on the basis that it would not reduce GHG but actually reflect higher GHG emissions compared to the Project. But the Executive Summary nowhere else discusses the Project "benefit" of reducing GHG by eliminating ship diesel emissions, although very confusing GHG reductions calculations are central to discussions later in the DEIR, in Chapter 4.6 on GHG. Perhaps that section's generally confusing and elaborate analysis of GHG reductions was too difficult to summarize for the Executive Summary?

The DEIR does not represent total accounting of GHG reductions for the entire Project (that is, for both transport *and* processing emissions). The Summary asserts without substantiation that there will be no changes to Refinery processing or emissions.

f.) An estimate of the Project's lifespan is not provided, creating a sense of the Project's indefinite perpetuity. (See this Response, Section 2, Subsection 7 on both port utilization and Project lifespan).

g.) Alternatives to the Project are briefly outlined and rejected or dismissed. The No Project Alternative is rejected for reasons that it would "result in higher emissions of GHG," and the fact that it would not meet Valero's Project Objectives. [p.ES-5]. This is a false characterization of the No Project Alternative.

h.) In Chapter 2, Table 2-1 Summary of Impacts and Mitigation Measures, environmental impacts are summarized in such a way as to dismiss them. Risks and potential impacts to public health and safety are not called out as such, since there are no DEIR chapters dedicated to Public Health and Public Safety; rather, those foreseeable impacts identified are discussed under the rubric of Air Quality, Hazards and Hazardous Materials, Traffic & Transportation and so on.

Table 2-1 bears close inspection. Many readers might be inclined to view this Table as *the* single guide to the Project's potential operational effects. Overall, it appears that Table 2-1 asserts there is little reason to be concerned about Project impacts. Table 2-1 does not identify all foreseeable impacts accounting for the severity of risks associated to rail activity and processing of North American sourced unconventional crudes.

The Table lists 51 impacts considered for their significance *before* mitigation: 38 are evaluated as being "Less than Significant;" nine are considered "Potentially Significant;" and one is listed as "No Impact." Of the nine listed as Potentially Significant, thus requiring further evaluation, Mitigation Measures are assigned and briefly described to render seven "Less than Significant" after mitigations are applied. However, when we count up the total number of actual Mitigation Measures provided, Mitigation Measure 4.1-1 is said to serve two impacts associated to construction phase; MM4.8-1 would serve to reduce three impacts; and MM4.11-4 would reduce two impacts. Thus, reviewing the Table, we find that of the nine impacts cited as "Potentially Significant," there are only a total of four Mitigation Measures that the DEIR would require as necessary. Of the nine, five are Air Quality impacts: Impact 4.1-1b and Impact 4.1-2 are designated "Significant and Unavoidable" and mitigations are said for both to be "not available." Why? No reasons are given. The other three are determined without explanation to be "Less than Significant" requiring no mitigation.

Of the two impacts considered "Unavoidable," 4.1-1b is extremely important but is defined in Table 1-2 so vaguely as to be incomprehensible for its significance.

> "Operation of the Project would contribute to an existing or projected air quality *violation*." [Table 1-2, p. 2-2; italics our emphasis]

To what does this Impact description refer? It doesn't say. The reader of only Table 2-1 would not understand the impact or why a violation would be predicted. The explanation only comes in Chapter 4, [Environmental Setting, Impacts and Mitigation Measures, Air Quality p. 4.1-16]. However, Chapter 4's deceptive explanation displays failures in reasoning with regard to increases of *local* impacts of the criteria pollutants cited that wouldn't be reduced by replacing ships by diesel-driven trains. (See Overview, Part II.Air Quality)

Impact 4.1-2 is also vaguely described: "The Project could result in cumulatively considerable net increases in criteria pollutant and ozone precursor emissions." Table 2-1 doesn't describe where the impact would be experienced.

Impact 4.6-1, listed under the topic "Greenhouse Gas Emissions" states, "The Project would generate direct and indirect GHG emissions." Its significance, before mitigation, is said to be "Less than Significant" with no mitigation required. The Executive Summary does not provide any discussion of GHG reductions calculations; GHG reductions are only referenced for Project substitutions of ships for rail; GHG emissions from processing of a changed crude slate are not estimated. Instead, the DEIR speculates that emissions from processing Project-imported crudes would not change, without evidence. (See this Response, Section 7 Greenhouse Gases).

For the most significant and "cumulatively considerable" impacts, Table 2-1 gives almost no information about the circumstances of Impacts 4.1-1b and 4.1-2 — both involving air emissions "up rail" of Benicia; but they are only vaguely ascribed to "Project Operations." Why no explanation of "how," "where" and "why?" (See this Response, Section 5, Air Quality).

i.) The DEIR's discussion of GHG emissions is misleading. Identifying the immediate GHG reductions "benefit" from eliminating 81% of ship deliveries cannot make the No Project Alternative less environmentally beneficial, since the total GHG contributions of the Project + Refinery have not been presented. The DEIR does not account for potential increases in GHGs that result from "greater amounts of processing" required for heavier crudes. (see Response, Part II.5 GHG) The DEIR's limited calculations are opaque for lack of projected and current GHG processing emissions statistics. Those GHG emissions "created at a distance" during extraction and any other processing that occurs before crudes are transported are not factored into the calculations of Project-related emissions from supply source to the Refinery. (see this Response, Section 2, Subsection 12)

j.) Why is Roseville the limit for locating rail-related potential impacts posed to "uprail" communities and environs? The Exec. Summary doesn't identify the UP rail routes into California, claiming that rail routes for crude trains are not disclosed in accordance with federal law under DOT authority. Yet, on any given day, Project crude trains traveling to and from the Refinery and the North American crudes' extraction sites would travel along one of only three UP rail routes into California well known to state residents: Donner Pass, Feather River Canyon and Dunsmuir/Shasta. In any case, all three routes would be

watched by the public keen to spot a crude train on its way through the mountains to the valley. A unit train composed of 100+ tank cars heading south or west from the California border along a UP would at least be recognized for likely carrying one or another of the highly flammable and dangerous crudes from North American sources destined for Bay Area rail terminals, including the VCBR Project terminal at Benicia.

Since the Project's physical and mobile extension by rail and/or marine vessel is not defined, neither are impacts associated to those geographical reaches. Thus the extent of the Project's foreseeable impacts as summarized in Table 1-2 are extremely and falsely minimized.

k.) ES-7 Areas of Controversy and Issues to Be Resolved, lists eight generalized topics areas without any specificity. For example: "Effects of train operations on local streets and I-680" does not name the actual location of those streets (the Benicia Industrial Park). What is that controversy about? There is no reference given to any other place in the document where the issue is discussed. (Similarly for other topics listed, there are no references to locations where full discussion of the controversy can be found.)

l.) A variety of Scoping topics and areas of concern and controversy that were raised by the public in official comment letters have not been addressed. There are too many to name. For example, seasonal flooding in the Suisun Marsh that could be foreseeably increased during a winter high tide that occurs simultaneously with severe winter storm with significant rainfall. In the case of a rail accident involving spillage of tar sands or Bakken, how would the train be reached and handled? If there is a rail displacement caused by earthquake anywhere along UP rails causing a Valero crude train derailment, explosion and fire, what would be the emergency response in Benicia and uprail?

m.) ES-8 Summary of Impacts, Resource Areas Evaluated does not provide a complete list of CEQA topic areas, items, resources and concerns reasonably requested under Scoping. Unfortunate omissions from the DEIR are separate chapters for Public Health and Public Safety (as previously stated above). Also requested, but missing are (list is not exhaustive): Aesthetics, Visual Quality, Light and Glare; Marine Terminal Operations. Examples of topical items requested but were generally omitted from DEIR discussion of impacts: identification and discussion of the Project "life span;" discussion of global warming impacts both direct and indirect owing to transport + processing of crudes that would be imported; "carbon intensity" of crudes likely to be imported; meaningful discussion of the impacts of increasing rail transport of crude oil in California; updated and specific emergency response plans, including local evacuation plans; harm that would be caused to waterways, wetlands and Suisun Marsh from catastrophic spills of tar sands or derailments involving Bakken fire and explosion and the emergency plan to specifically address such disasters.

n.) Cumulative impact analyses are so weak they must be considered dismissive. Example: with regard to cumulative rail/public safety and environmental risks, there is no discussion of the projected and very likely increase in the *total number* of freight and passenger trains traveling on UP rails daily, which VCBR Project crude trains *plus other*

additional crude unit trains would be also traveling daily, thus to contribute to increased risk of accidents involving serious hazards and foreseeable emission and other impacts. Nowhere is it said that there has been a 600% increase in the number of crude unit trains on the rails since 2008.[16] Table 5-1 that lists other large-scale energy and refinery projects that already exist or are in planning stages in the region that could contribute to cumulative effects provides no coherent discussion of the possible connectivity of the VCBR Project with any one of the other projects listed.

6. PROJECT DESCRIPTION – FAILURES TO DISCLOSE: [3.1 – 3.7]

(Extensive comments on the Project Description are found in this Response, Section 4)

The DEIR Project Description fails dramatically as an incomplete, narrow and inaccurate account of the Project setting and full scope of the VCBR Project, its Objectives, its actions and impacts.

a.) The one (dark) Google aerial map showing the location of the Refinery and its boundaries, including the Project site [Table 3-2 Valero Refinery Boundary], is hardly legible: existing trackage is not clearly visible and Sulphur Springs Creek is not seen. One thing is made clear, however: the obvious "tight quarters" in which the Project's rail off-loading racks are said to "fit," both in context of the Refinery itself, its tank storage area and the surrounding Industrial Park, with Sulphur Springs Creek effectively a natural "border" to the proposed rail terminal that would run along 3,000 ft. of the Creek's length.

Clear sectional maps of all tracks in the Industrial Park with roads and buildings must be included in a revised DEIR. A map is also needed with supporting photos of the Park Rd. "at grade" rail crossing and the nexus of on- and off-ramps to I-680 and intersections with Bayshore Rd. and Industrial Way. Switching operations need to be at least diagrammed to show the length of a 50-car unit train and the space required between the Port area and Park Rd. for those switching maneuvers to take place. Photos and maps that clearly show Sulphur Springs Creek and its outflow are necessary for the reader to be able to visualize the actual conditions described by the DEIR related to the Creek's vulnerability lying very close and parallel to the Refinery's proposed rail offloading rail racks.

Without clear maps and photos, a reader unfamiliar with the layout of the Industrial Park would hardly have a clue to the "squeeze" and those "tight quarters" in which Project-related rail maneuvers would have to be accomplished and the problems associated to the track layout generally for moving trains in and out, especially considering that other manifest freight trains would routinely be arriving and departing, as well as being sidelined in the Park.

The rejection by (presumably) the Applicant, as well as the DEIR preparers, of certain Project Alternatives that must have been preliminarily considered and investigated as

[16] Earth Justice, "Crude-By-Rail Rolls into America's Cities" June 2, 2014 (feature story, Pipeline on Wheels)
earthjustice.org/features/pipeline-on-wheels; http://earthjustice.org/climate-and-energy/oil-gas-drilling

outlined in "Alternatives Considered but Dismissed from Further Consideration in this EIR" [6.3 Alternatives Analysis, p. 6-4, 6-5], present a case in point about the worrisome conditions for the Project location on Valero Refinery property. The possible Alternatives that were not presented in the Draft Report for lack of feasibility were rejected because of "insufficient space" (on Valero property at the Port of Benicia, or on AMPORTS property near the Benicia marine terminal). This "insufficient space" problem must be discussed under Project setting as described in the Project Description. The Project Description finds no problem that the off-loading racks would be positioned within feet of both product storage tanks and Sulphur Springs Creek whose outlet is Suisun Bay.

b.) The Description effectively masks that *within the framework* of the VCPR Project, transport options would be kept open and could foreseeably shift with flexible utilization of all three means (rail, marine vessel, pipeline) to expand access to unconventional "North American-sourced crudes," from North Dakota's Bakken shale and/or other Midwestern shale formations and Canadian crudes from Alberta's tar sands.

The Project Description doesn't specify that Bakken and tar sands are intended imports; but this is obvious, as reported by the Goodman Group Report's economic analysis based on Valero Energy Corp's investor reports.[17] Bakken and tar sands must be identified and fully characterized in a revised Draft Report as highly likely candidates for import under the rubric of the VCBR Project.

The Project Description focuses exclusively on rail import development objectives as might be expected; however, doing so jeopardizes the public's fair understanding of the effects of transport flexibility built into the Project that, if accounted for in the Description, would alter impact analyses for Project-related direct and indirect emissions calculations for transport (diesel/GHG) and also for emissions resulting from processing a changed crude slate.

As it stands, the Project Description obscures the greater reality implicit in project Objective 1. For while the Objective states that the Project "allows for delivery of up to 70,000 barrels per day of North American-sourced crude by rail," its wording in no way proscribes accessing those same crudes by *other* transport means at any time. Objective 1's use of the small words "*up to*" signals the flexibility and variability in the volume of crude that would be delivered by rail. It follows that the rail Project's primary Objective provides for variability in the means of importing desired crudes and also variability of the volumes of oil to be delivered by rail, marine vessel and/or pipeline.

For a reader to grasp the DEIR's depth of failure to disclose crucial information, it must be recognized that the Project Description does not provide current figures, either as daily averages or range of actual amounts, for the total volume of crude oil that the Refinery imports each day by marine vessel (large or small tankers and/or barges) and by pipeline. Instead, the DEIR only offers percentages without the total figures the percentages

[17] The Goodman Group Report was submitted as comment on the IS/MND and can be found in the DEIR's CD-ONLY "Scoping Report."

represent a fraction of: for example, (paraphrasing) "81% of ship deliveries would be reduced", or "the Refinery receives approximately 16% of its crude by pipeline from the Central Valley." Without the necessary data figures for total volumes imported each day, the DEIR's impact analysis is misleading, necessarily and obviously skewed and inaccurate.

A reader must infer, reading between the lines, that the Project provides fundamental, built-in flexibility to adjust numbers of rail, marine vessel (tankers and barges) and pipeline deliveries and, as well, the variable volumes imported by those transport options. Marine versus rail delivery percentages of total volumes of crude imported would likely change depending on "external" economic factors and market conditions: crude price advantages and disincentives, transport costs; accessibility. Therefore, the Project would allow for variable import options for delivery of Bakken oil and Canadian tar sands – or any other domestic or Canadian crudes sought for price advantage that become accessible by whatever means of transport.

Allowing for North America's unconventional crudes to be delivered alternatively by tanker, barge and/or pipeline would not violate any terms of the VCBR Project framework as presented in the DEIR. Under the Project's conceptual framework, what, if any, are the limitations or constraints on transport "options?"

c.) What is the Project's lifespan? A project's timeframe, beyond construction phases, is a typical CEQA topic for development projects of a magnitude that would foreseeably result in serious adverse and significant impacts, which may increase cumulatively over time. The DEIR curiously omits any discussion of the Applicant's expectations for the Project's operational "life" or duration. Why is this? The DEIR nowhere references the topic, yet specific questions are posed by Scoping Comments about the Project's intended life-span.[18] There is no reason that the Applicant's aim to enhance "options" for transport and processing of domestic and Canadian unconventional crudes should prevent or proscribe DEIR discussion of the Project's operational life-span.

Thus, the Project Description does not make clear the Project's open-ended timeframe and full scope of Project operations and impacts.

d.) The specific and unusual challenges posed by the Project deserve special attention: they raise precedent-setting questions about the parameters of CEQA to address the total scope and reach of this Project, which envisions interstate rail transport and 100+ car unit trains loaded with dangerous crude whose specific properties, which the DEIR fails to discuss, pose special risks and hazards associated both to their transport and also to their processing at Valero's Benicia Refinery. What form of federal public review is there for reviewing a Project involving rail transport of dangerous crude oil across state lines and/or international borders?

[18] See Scoping Report – pages 638, 608, 622, 857 – where the question of the Project lifespan is raised in comments on the IS/MND and is of obvious concern.

The DEIR's choice to geographically locate its furthest "detailed" consideration of rail-generated diesel emissions impacts to Roseville is an example of how the DEIR forecloses on evaluating the greater reality that the VCBR Project encompasses:

- an outdated US Dept. of Transportation regulatory framework recommended for changes with recently initiated proposed new rule-making on rail safety as yet unresolved; no current protection for communities and the environment from rail hazards and extraordinary risks posed by the transport of dangerous volatile unconventional Bakken oil termed an "imminent hazard;" with federal Preemption granted to Union Pacific, denying local, regional or state jurisdictions the means to mitigate rail risks in communities;

- distant sources of unconventional domestic and Canadian crude oil supplying the Refinery via rail routes crossing at least three states with crude-loaded unit trains of 100+cars enroute headed for California and the Bay Area from North Dakota, Midwest, Texas and/or or Alberta Canada;

- only three well recognized Union Pacific rail routes crossing into California through treacherous Sierra mountain passes overlooking rivers that are drinking water sources for an entire drought-stricken state and passing by treasured lakes and through tinder-dry national forests;

- UP rails routed through rural and urban population centers, including the state capital of Sacramento, the City of Davis, home to a University of California campus, Fairfield the county seat of Solano County, and also, agricultural lands, waterways, highly sensitive wetland habitats, floodplains, Delta drinking water sources, the Suisun Marsh on the Pacific Flyway for migrating birds;

- a Refinery set in a small historic City of Benicia, a stationary source of major local and regional pollution that would process those unconventional crudes acquired;

- a rail terminal located at the edge of Refinery property in the midst of an industrial park with important private/public state and regional assets nearby that are vital to the City of Benicia, including I-680 freeway, two bridges, a UP rail trestle bridge, historic resources dating to early days of statehood and Civil War era, and the Port of Benicia;

- crude trains maneuvering four times per day on rail spurs remaining from US Army uses that pose constricted conditions for maneuvering trains in and out of the industrial park with certain-to-be added risks disruptions and safety risks posed to businesses and traffic;

- the entire area of the Industrial Park designated as part of the Formerly Used Defense Site Investigation by the Army Corps of Engineers, with much of the area left unexamined for remaining hazards since the FUDS investigation was terminated in 2009.

- a crude slate that would change over time: increases in local emissions and Refinery processing upsets and accidents predicted from processing a changed crude slate comprised of "lower grade crudes," adding to local and regional air pollution including fine particulate matter PM2.5.

- future plans for the Valero port, under rubric of the VCBR Project, could entail import by marine vessels (tankers or barges) of Canadian tar sands and/or other domestically sourced unconventional "lower quality" crudes.

- conditions for marine vessel transport in the future that would determine increases in use of barges or tankers, the condition of the existing pipeline that currently delivers San Joaquin crude to the Refinery port.

What are given constraints on rail transport of crude oil? The DEIR does not disclose.

Such issues as cited above are hardly more than touched upon in the DEIR's Project Description or are not addressed at all.

e.) <u>About Project Objectives</u>:
The Project Description's presentation of Project Objectives, [3.2.1, p. 3-5], implicitly preserve a key objective of VIP, clearly stated in the VIP DEIR [3.2 Project Objectives, p. 3-3], which is <u>to enhance the Refinery's "flexibility for processing lower quality raw materials.</u>" Why is the VIP goal not asserted directly with regard to the Applicant's aim to keep "transport options" open for importing domestic and Canadian crudes by rail, marine vessel and/or pipeline?

The Project Objectives' implicit aim is profit advantage to Valero: Objectives 1, 2, & 4 are the DEIR's points of departure for its descriptions of the Project and its identification of impacts and analyses. <u>Only if Valero's economic aims are recognized as fundamental to Project Objectives 1, 2 & 4 can the trajectory of the DEIR's arguments and reasons for the consistent minimizing of the Project Description and Project impacts be understood</u>.

Only if the City of Benicia's decision-makers would consider Valero's profit motives more important than protecting community public safety and public health now and into the future could the Project itself be coined the "Environmentally Superior Alternative," as the DEIR declares, apparently to support Valero's aim.

There is no mention in the Project Objectives of "price advantage" to Valero of being able to access North Dakota's glut of tight oil, or tar sands dilbits.

The transport flexibility implicitly provided by **Project Objective 1** has been discussed above.

Project Objective 2 expresses the goal to "Replace marine vessel delivery of up to 70,000 barrels per day of North American-sourced crude oil by rail," an aim that is argued in the

DEIR to reduce greenhouse gases, the *presumed* result alleged to support **Project Objective 5** [ES-2], which addresses California law AB32, the California Global Warming Solutions Act of 2006. However, reducing GHG is not a primary goal of the Project, so much as a *requirement* of the Project by state law.

The DEIR's supporting evidence for the Project's ability to meet the state requirement for GHG reductions, expressed as **Project Objective 5,** is certainly flawed given the incomplete accounting of the full scope of the Project as previously discussed above.

AB32 calls for drastic reductions in CO2 equivalent tons of GHG by 2050. Even if the DEIR's reporting of GHG reductions from ship emissions were valid, the discussion of GHG contributions from "the whole of the Project" including processing operations underestimates potential GHG contributions from processing and fugitive emissions while exaggerating the benefit of the substitution of rail deliveries for ship deliveries. The DEIR doesn't attempt to account for the total increases in GHG that could be expected from all Project operations: all transport + storage + processing of the unconventional crudes to be imported.

The DEIR flatly insists that there would be no change in the character of the currently processed "crude blend," yet no *specific* information pertinent to full discussion of processing impacts is provided by the DEIR; rather, the DEIR provides Valero's request not to disclose those facts, with their reasoning supplied in Appendix D - "Discussion of Confidential Business Information." (See this Response, Section 3)

Project Objective 4 states that to implement the Project would not require any change in process operations and/or change of processing equipment. Although **Objective 4** was apparently meant to assuage public fears about such future potential changes, it also implicitly suggests a cost-saving benefit to Valero. For example, no new expensive hydrogen unit would be called for at this time, according to the DEIR. Why? The only reason given is that more hydrogen is "not essential to refinery operations or to this Project." [Table 5-1, Potential Project of Cumulative Effects Evaluation]. Yet the new hydrogen unit was permitted as part of the Valero Improvement Project [VIP]. Why? The permit for constructing the hydrogen unit expires in December 2014. Would more hydrogen be required for processing increasing amounts over time of tar sands dilbits? If so, is Valero keeping its options open about importing quantities of tar sands, projecting a possible renewal of their permit for the hydrogen unit at another time in the future? Would such a permit renewal require further environmental review under CEQA? Nothing is said about these variables. Why?

7. PUBLIC HEALTH & PUBLIC SAFETY:

a.) As previously stated, invoking Preemption and Trade Secret law does not exempt the DEIR from fully disclosing the numerous potential impacts to public health and safety related to processing unconventional crudes likely to be imported (Bakken and tar sands) and the rail hazards and risks that would expose both urban and rural populations and surrounding environments in the vicinity of UPRR's tracks to significant and cumulatively

considerable levels of harm in the case of rail accidents. Those risks must be discussed relative to their potential severity. The DEIR avoids and/or omits full discussion of serious foreseeable public safety risks and health risks.

b.) About health-related emissions impacts from possible crude slate changes:
The Report must fully address the foreseeable possible effects of a changed crude slate that would likely be predominantly composed over time of the unconventional crudes intended to be delivered at a rate of up to 70,000 barrels per day by rail. (there could be more volumes of those crudes imported by barge, tanker or pipeline.)

The controversy over whether there will be potential increases in toxic air emissions owing to the processing of a changed crude slate – thoroughly discussed in the Phyllis Fox Report submitted on the IS/MND – remains unresolved by the DEIR's reliance on incomplete Project Description, incomplete characterization of crudes likely to be imported, and thus qualities of the crude slate that would be predominantly made up of those crudes over time. The DEIR therefore misleads the reader, stating there would be no changes to the crude slate's quality and further, without substantiation, that therefore there would be no increases in processing emissions. [4 Impact 4.1 -1b, p. 4.1-17] The DEIR hedges about *actual possible emissions increases,* qualifying its assertions by alluding to permitted emissions levels established by VIP permit in 2003 and also the 2010 Clean Air Plan that the DEIR describes as not allowing increases over those threshold limits. This is a ridiculous assertion. An established permitting level does NOT prevent emission increases over a permitted threshold. Emissions exceed permitted levels during acute emission spikes, during releases, refinery "upsets" and accidents. Fines may be assigned months later by the Air District and reports are usually not immediately available about the actual incident and the emission excesses. Acute releases are not monitored or recorded in real time by the Air District's regional monitoring stations, although spiking emissions can affect local populations living in the vicinity of spiking emission source(s). Acute releases above averaged permitting limits of toxic air contaminants "happen" during flaring incidents. Does Valero monitor for PM2.5 "condensables?" (Apropos recent controversies over lack of PM2.5 monitoring of FCCU sources at Chevron.)

c.) Historically and currently, there have been no perimeter (fenceline) air monitors installed for real-time monitoring of Refinery gases and no community-based monitoring station permanently established with an active community access website as was intended by the Valero/Good Neighbor Settlement Agreement of 2008 and as Amended in 2010. The DEIR does not account for the lack of locally based ambient air monitoring. It is well established that conditions that are generally recognized by the Bay Area Air Quality Management District as "sufficient" to identify air quality conditions locally in Benicia are disputed by the Good Neighbor Steering Committee and other regionally based environmental groups (Communities For A Better Environment; Natural Resources Defense Council; Global Community Monitor). This as yet unresolved controversy should be identified in the DEIR since the lack of real-time community monitoring denies the public understanding of ambient air quality and also potential exposures to *acute* spikes of hazardous gases present in the air at a specific time. Eight hour, 12 hr., and 24 hr. "averages" used by Air District sampling methodologies, often with results reported many

months after a toxic emissions "release" or "upset," are useless for assessing risks of exposure in real-time associated to accidents, fires, other unexpected releases and other sources of air pollution that risk people's health.

d.) Misleading or missing information regarding rail safety issues:
As the DEIR outlines in the Project Description [Chapter 3.1.1.2, p 3-1], the Project would involve construction of new "rail spur tracks, a tank car unloading rack, pumps, connecting pipelines, and infrastructure," for the purposes of offloading at the Refinery a total of 70,000 barrels of crude oil each day by rail, operated by Union Pacific ["UP"]. The offloading terminal can accommodate up to 50 cars on two separate tracks, such that the DEIR supports Valero's request to UP to deliver the total crude expected per day by two 50-car crude-loaded unit trains. The DEIR seems to intend to keep the reader focused on a limited number of daily trains (2), rather dwell on the fact that the Project involves the arrival and departure of a total of 200 tank cars each day, and at least two locomotives per train, or up to 8 engines per day, to and from UP's Roseville rail hub.

There is no information provided by the DEIR about the quality or type of UP locomotives that would haul 100 tank cars in and out of the Benicia's city limits and beyond. As recently as September 9th, two UP locomotives derailed around 2:30 a.m., requiring the two engines to be returned to UP's Roseville rail hub for inspection and repairs. The Times Herald reported[19] that the locomotives were used for switching operations, not for hauling crude oil trains. The DEIR must address distinctive characteristics among locomotive types their capabilities, mechanical vulnerabilities and "lifespans."

The DEIR describes the Applicant's voluntary commitment to use upgraded tank cars (CPC-1232s); however, the DEIR provides little if any information about locomotives to be used for Project trains, the number used for both 50- and 100-car unit trains, (for 50-car loaded trains and empties traveling between Roseville and Benicia, and the larger, heavier 100+ car trains, loaded and empties, traveling between the crude source and Roseville). Has UP made any voluntary commitment to use "best available technology" grade engines, thus those that are proven superior energy efficient models tested under conditions for long-distant hauling of 100+ car crude-loaded trains?

e.) A concerned reader is forced to look outside the DEIR for information pertinent to the assessment of cumulative impact analyses. For example, other large-scale projects in the region and state would foreseeably contribute to cumulatively considerable adverse consequences for both Public Health and Public Safety, locally and "up rail."

While we realize that even a revised DEIR would not likely detail every possible locale and consequence pertaining to uprail derailment impact scenarios, there must be sufficient discussion of the potential, foreseeable risks of a 100-car crude unit train entering California and derailing while traveling through various topography and geographical features: mountain passes (Donner Summit and Feather River Canyon) and treacherous gorges (Dunsmuir), in the midst of drought-stricken forests at higher elevations and in

[19] Times Herald, Sept.9,2014 "Union Pacific Investigates Benicia Derailment."
http://beniciaindependent.com/union-pacific-investigates-benicia-derailment/

foothills, along rivers that provide drinking water, through small towns and sparsely populated areas where emergency response would likely be inadequate, mostly served by volunteers dispersed over a wide region.

f.) It's been reported that the Refinery has at least one month's supply of crude stored in its tank farm. If there were any significant, prolonged disruption of the rail supply line, how would this affect Refinery operations? Would ship deliveries be resumed quickly to acquire crudes to replace the volumes "lost" to rail delays or other rail problems? Again, such a "switch" would change analysis of GHG impacts.

g.) What, if any, priority has UP granted Valero for its train scheduling requests? Would other businesses in the Benicia Industrial Park that are dependent on UP for rail freight transport have to expect delays of manifest train arrivals and departures on the same tracks owing to possible priority scheduling of Valero crude trains? Would manifest freight arrivals, departures and switching operations be affected and possibly run into "commuter time?" The DEIR avoids discussion of "rail logistics" involving other companies in the Benicia Industrial Park.

The public has been told to "trust Union Pacific's safety record" and write to DOT about rail safety concerns. These injunctions do not prevent rail accidents that are very likely to occur under the Project. In the last 10 months there have been three train derailment incidents – termed "minor," without injury or spills – in Benicia's Industrial Park within close proximity to the Refinery.

The case of such a major accident occurring in the vicinity of the Refinery or anywhere within the Benicia Industrial Park that would potentially impact businesses, threaten occupants and key infrastructure, is not entertained in the DEIR. This omission represents a fatal flaw, since claims that such a possibility would be very low are unsubstantiated by reliable statistics and the recent history of derailments at or near the Park Rd at grade rail crossing. A full, *credible* "worst case scenario" must be described so that emergency measures put forward by the City of Benicia Fire Department and those of Union Pacific and Valero can be judged adequate to address a major catastrophic accident within the City of Benicia's boundaries, including in the environs of Sulfur Springs Creek and Suisun Marsh. Concern on this issue was raised in Scoping and must be addressed in a revised DEIR.

h.) The DEIR downplays and underestimates the serious harm that would be posed to sensitive habitats, lands and waters by foreseeable train accidents: derailments involving flammable crude oil (Bakken) or dangerous and dirty "dilbit" (tar sands diluted bitumen), within the City of Benicia and also "up rail," near and far – all the communities and environs through which crude-loaded trains would travel destined for the Benicia Industrial Park and the Valero Refinery from their points of origin.

i.) The DEIR minimizes not only the geographical area to be evaluated for risk, but also, the degree of threat posed (one, at most two tank cars rupturing and igniting). Further, by its risk assessment methodology, the DEIR conjures that the risk of a derailment with

spillage of crude oil that would foreseeably threaten communities and environs along UP tracks between Roseville and the Valero Refinery would be "less than significant," occurring only once in 111 years, thus so infrequently that no mitigation would be required. (See this Response, Section 8)

j.) There are no particular locations in the Draft Report where a reader can find full descriptions and accounts of the totality of Project-related public health risks and impacts. Certainly the DEIR's minimal account of cumulative impacts doesn't provide an accurate and total account.

Instead, we find limited discussions peppered through multiple DEIR sections and appendices, proof of which is provided by the CD version's search tool.[20] An "updated" Health Risk Assessment [Appendix E.6 — CD ONLY — "Updated Methodology for Assessment of Risk and PM2.5 Concentrations at Receptors near Locomotive Tracks in Fairfield, CA," dated June 11, 2014], was included to assess potential health hazard exposure risks from diesel emissions posed to typical sensitive receptors identified who live nearest to tracks running through Fairfield. Three wind rosettes that indicate wind speeds and directions, dated from 2000 to 2005, were supplied by Valero for this study to compare wind conditions around the Refinery, in the City of Suisun, and at the Sacramento Executive Airport. The rosettes appear to describe wind conditions averaged over a 5-year period that would be comparable to conditions in Fairfield. However, acute situations (stagnant winter overcast days, no wind) are not captured by "averaging," such that data for winter months when emissions may accumulate and persist at ground level is not "noticed" in the data supplied.

In any case, the Fairfield HRA study, assigned to address "significant and unavoidable" diesel locomotive emissions that would impact residents in Fairfield living nearest Union Pacific tracks, apparently caused a week's delay in the DEIR's officially announced release date of June 10th. This last-minute addition speaks generally to the DEIR preparers' lack of coherent accounting of public health risks and impacts generally.

k.) The finding of "significant and unavoidable" locomotive diesel emissions [Impact 4.1-2] that would result in cumulatively considerable net increases in NOX and ozone precursors is reported to have "no mitigation available." On the contrary, "off sets" for those cited unavoidable emissions could be required that would benefit the Fairfield community, environmental protection and regional air quality generally. The installation of a "best technology" real-time monitoring station or stations within the vicinity of the Refinery that could monitor off-site gases and other sources of air pollution, including

[20] The following are sections and appendices in the DEIR where health and safety issues are partially discussed or referenced: Hazards & Hazardous Materials; Air Quality; Geology & Soils; Biological Resources; Transportation & Traffic; Cumulative Impacts; UPPR Hazardous Material Emergency Response Plan 2010 [Appendix H]; Construction Emissions [Appendix E.1]; Railroad Crude Oil Release Rate Analysis for Route between Roseville and Benicia [Appendix F]; Final Transportation Impact Analysis 2013, [Appendix I]; Updated Methodology for Assessment of Risk and PM2.5 Concentrations at Receptors near Locomotive Tracks in Fairfield, CA [Appendix E.6]

from mobile sources, as called for under the VIP/Good Neighbor Steering Committee Settlement Agreement could at least compensate for the fact of "unavoidable" emissions projected resulting from excess diesel emissions.

l.) Given that Fairfield residents would be unduly exposed to added locomotives' diesel emissions deemed "unavoidable," why are conditions for occupants of the Benicia Industrial Park not subject of a special study? How many industrial park employees work a night shift in the vicinity of the Refinery and Union Pacific tracks? Park employees could conceivably be exposed to locomotive diesel engine exhaust generated by at least two of four 50-car unit trains daily (Project trains' arrivals and departures) as well as to diesel emissions from idling Project locomotives, and also, to diesel exhaust from other manifest freight trains traveling daily in and out of the Industrial Park, idling, being side-lined, etc. The DEIR must also account for Refinery-plus-Project exposure risks for people living and working in the vicinity of the Refinery and UP side spurs and other tracks. Analysis must be clear about how daily exposure to toxic air contaminants or an acute daily dose of diesel emissions can potentially contribute to greater respiratory stress and other serious chronic health impacts.

m.) Since there is little reliable evidence given to support the DEIR's description or evaluation of impacts, what reasons are there for the public to trust the conclusions of Table 2-1, Summary of Impacts and Mitigation Measures, [Chapter 2, Summary of Environmental Impacts; p.2-2 - 2-5] especially when specific reasons for public mistrust are legion throughout the Draft Report?

n.) Risks posed by rail transport and processing of North American-sourced crude**:**
In 2014, the DEIR must accurately describe, analyze and evaluate the risks, hazards, safety and health impacts related to rail transport into Benicia and through uprail communities and environs of highly flammable "light tight oil" from North Dakota's Bakken shale formation and also the dirty, heavy metals-laden tar sands bitumen, diluted for export after extraction from Alberta Canada's tar sands mines.

8. CUMULATIVE RISK ANALYSES – RAIL + REFINING, FAILURES TO DISCLOSE:

a.) The DEIR provides faulty assumptions and risk hazard analyses that minimize the threat of those foreseeable and *credible* worst case scenarios and cumulative risks involving the transport of volatile Bakken, or tar sands dilbits, and their processing. The community of Benicia would be greatly impacted by prospects of rail transport of dangerous crudes through the Benicia Industrial Park, coupled with the effects of processing those same crudes that would make up a changed crude slate, threatening increased emissions and prospects for major accidents from gas leaks, fires and corrosion. The cumulative additional risks that the Project poses would be added to existing risks and local air quality impacts the community already endures resulting from the presence of the Refinery and other surrounding pollution sources – including freeways and a major port with shipping operations that involve Valero's petroleum coke terminal and tanker offloading. The focus of these comments will be on rail impacts. (Discussion of air quality impacts are discussed

in multiple sections elsewhere in this Response).

The DEIR does not discuss the effects of tar sand's spills. Tar sands primary constituent, bitumen, cannot be safely removed (without dredging and soil removal) from rivers, lakes, wetlands, bays and shorelines. Major catastrophic derailments and pipeline ruptures in Canada and the U.S have involved fiery explosions of Bakken and disastrous spills of tar sands. In less than a year between July 6th 2013 (Lac-Mégantic, Quebec) and April 30th 2014, (Lynchburg,VA), Bakken has exploded during (6) train derailments causing spills, raging fires and 47 deaths (at Lac-Mégantic). Although to our knowledge, tar sands have not yet been transported by rail into California, the destructive capacity of tar sands dilbits when spilled is evident from the 2010 Enbridge pipeline rupture resulting in the spillage of 850,000 gallons of dilbits into a tributary of the Kalamazoo River, where tar-like bitumen spread 35 miles along shorelines and on the river bottom that remain impossible to clean up. Through 2012, cleanup efforts for the Kalamazoo River had cost $1 billion. That disaster points to the real hazards of shipping tar sands by rail through communities and sensitive environs and also by barge through the Strait into Valero's port.

Dismissive, erroneous, speculative and cursory evaluations of cumulative impacts to Biological Resources lack any basis in science and do not apparently regard recent evidence from the Enbridge pipeline tar sands spill cited above. The concluding statement of Section 5.4.3.2. on potential "terrestrial" spills envisioned happening in "marshland" is an example of the insulting accounts presented as cumulative impacts analysis generally:

> "The switch from ship transport through the aquatic environment to railroad transport through the terrestrial environment may arguably reduce the likelihood for a spill, and/or reduce the environmental impacts resulting from a spill by being easier to contain and clean up in a terrestrial or diked, semi-vegetated marshland." [5.4.3.2. p. 5-16]

Dredging and soil removal of fragile marshland as a "last resort" means of cleanup of tar sands bitumen, (or any other crude) are not ecologically safe or sound solutions, e.g. they are environmentally destructive of protected habitat. If a catastrophic spill of tar sands, or any other crude for that matter, were to occur in the Suisun March, the problem is magnified for cleanup. Fatuous claims are not worthy of an environmental review under CEQA.

Further faulty analysis of potentially cumulative impacts to Biological Resources resulting from "state-wide increase in railcar traffic (frequency and duration)" on UPRR tracks through sensitive landscapes all along the rail routes conclude that there would be less than significant impacts. For special wildlife and habitat protection, the following assertion is sophistry:

> "The cumulative increase in railcar usage, however, would occur on existing mainline track where baseline usage is already routine. Thus, the addition of Project-related railcars to the state-wide network would not involve a cumulatively considerable contribution to the [*existing*] impact on biological

resources." [5.4.3.2. p. 5-15] (Note: our insertion of the word "existing" clarifies what is alluded to as the "routine" baseline usage of tracks running through sensitive landscapes.)

b.) Evaluation of cumulative impacts from Greenhouse Gas Emissions [5.4.3.6 p.5-17] are dismissed cleverly, first, by associating the Project's overall GHG contribution from diesel locomotive exhaust relative to the state's contribution to the total global atmospheric condition, and second, by comparing the Project GHG to the total contribution of GHG by the whole City of Benicia. The comparisons are false and misleading. The Project GHG contributions should be compared to similar projects of the same scale, and, in any case, the total contributions should include Refinery + Project GHG emissions and therefore, the comparison should be made to a Refinery + Project of similar scale (comparing measurable permitted daily throughput).

c.) Where does the VCBR Project begin and end with regard to foreseeable cumulatively considerable impacts resulting from projected increases in crude unit trains traveling UP rails through California and beyond?

There are only three rail route entry points into Northern California. Each route passes through treacherous mountain terrain, along the Feather River Canyon, Donner Summit and Shasta/Dunsmuir. The DEIR mentions the routes, but does not divulge which route or routes that Union Pacific crude trains destined for Benicia would be taking. The DEIR cites the federal exemption for reporting such information to the public, such that, the DEIR avoids discussing the potential and clearly foreseeable "worst case" scenarios that could occur on either of the three existing train routes that could foreseeably result in chaining consequences from spills or fires should there be a catastrophic train derailment involving either Bakken oil or tar sands: spillage affecting the ecologies of major rivers, watersheds and/or lakes and fires burning up forests, wildlife habitat, threatening communities, etc.

Why does the DEIR arbitrarily evaluate *only* a single risk model? The generally flat terrain between Benicia and Roseville does not resemble the lands between Roseville and the State's mountainous border region or the territories beyond. The DEIR explains the omission of any discussion of possible accidents beyond Roseville by citing purportedly proprietary information under Preemption concerning decisions for train routing. Withholding information on the basis of "secret routing" information is a false argument, since a model can be built to describe a credible worst case scenario derailment for each of UP's three rail routes into California without divulging actual routing of any particular future Project-related train. Certainly, the three train routes into northern California are not a secret.

The DEIR must discuss the historical record of train derailments [Shasta/Dunsmuir in particular] on all three routes and discuss potential for similar accidents, with differing consequences, given that crude oil, likely Bakken or tar sands, would be the product transported through varied mountain topography with forests, lakes and rivers bordering rail lines.

The State's Working Group Report cites those topographical hazards as a particular constraint on attempts to provide for rail safety for delivering Bakken oil into the state. Importing tar sands via those same rail routes poses equal and distinct threats. Are those routes into California not significantly impressive enough as "geographical hazards" themselves to require further discussion in the DEIR than the minimal acknowledgement provided?

"Credible worst cases" and their foreseeable effects must be clearly discussed in the DEIR to allow for understanding the short- and long-term consequences of such incidents, not only for emergency response preparedness but for environmental cleanup.

There can be no doubt: foreseeable cumulatively considerable risks would be posed by the Valero CBR Project when viewed as co-existing and sharing Union Pacific rail lines with other similar rail projects and terminal operations proposed and under review in the greater Bay region and Southern California for importing domestic and Canadian sourced crude. Oil terminal projects could involve multiple transport options that could also supply a future domestic crude export market. Blast zone maps have been created to show the numbers of people living near refineries, oil terminals and rail lines in the Bay Area and beyond that would be put at risk of a catastrophic rail derailment involving flammable Bakken and/or other liquid fossil fuels (butane, propane, ethanol, etc.).[21]

A 28-member board of the Sacramento Area Council of Governments [SACOG] has sent an official comment letter to the City of Benicia articulating a spectrum of failures of the DEIR to identify the extent and severity of plausible, foreseeable impacts of 50- or 100-car Bakken- or tar sands-loaded unit trains traveling through their cities, through and by treasured and vulnerable lands and waters on their way to Benicia and Valero's Refinery.

Cumulative impacts from other foreseeable and existing liquid fossil fuel-loaded unit trains that would be increasing in number and traveling the same UP tracks are not discussed. Yet oil terminal and other refinery expansion projects currently in the planning stages and under review in California point to the projected increases in rail freight shipments of dangerous fossil fuels including Bakken oil and tar sands.

The cursory review offered in the DEIR's Table 5-1 "Potential Projects For Cumulative Effects Evaluation" hardly enables the public fair appreciation of cumulative effects of that 25-fold increase in numbers of crude-loaded unit trains projected for California in two years. By that year, it is predicted that a total of approximately (8.8) 100-car crude unit trains operated by both Union Pacific and BNSF will be crossing daily into California, sharing the same rail lines with other freight trains and Amtrak passenger service. The Draft Report hardly mentions the ramifying risks to public safety and the environment in Benicia and across the state.

[21] Forest Ethics, July 7, 2014 – "25 Million Live in Oil Train Blast Zone: New Online Mapping Tool Shows Threat to Homes, Schools and Cities."http://forestethics.org/news/25-million-live-oil-train-blast-zone-new-online-mapping-tool-shows-threat-homes-schools-and

The daily addition of *numbers* of Valero Project crude trains that would be *added to existing scheduled services* must be accounted for by the DEIR in sufficient detail to make clear the myriad likely VCBR Project's *direct and indirect* rail impacts that would be "managed" by Union Pacific: thus, risks and hazards associated to the number of daily Project trains traveling from crude source to Roseville, and from Roseville to Benicia: 100+ crude-loaded tank cars hauled from crude source to UP's Roseville rail yard and the 100+ "empty cars" that would be hauled back to the crude source for the next round trip; Project-related train re-configuration operations at the Roseville rail yard involving the reassembly and preparation of crude-loaded trains for departure to Benicia, and concomitant re-assembly of "empty" trains (likely manifest trains with more than 100 cars, sometimes mile-long trains) for return to points of crude origin; and finally, the total of 100 crude-loaded tank cars daily that would be hauled between Roseville and Benicia, then the same 100 empty cars that would be returned from Benicia to Roseville.

Table-5-1 omits from its listings the existing Kinder Morgan rail terminal and transloading facility in Richmond and also omits Targa Resources' plan for a large oil terminal operation for the Port of Stockton.

Table 5-1 only offers one measurable criteria for basing DEIR conclusions on potential significant impacts: the literal physical distance (proximity) to the Valero Refinery to a named existing or planned facility. This cannot be the only criteria. In any case, whether "proximity" would result in increased risks of train accidents or contributions to toxic air emissions is not explained.

Table 5-1 thus provides incomplete information on regional existing and potential players and draws no connections or integrative analyses that would make sense of the "list" or illuminate the overall effects resulting from the VCBR Project simultaneously conducting operations at the same time as one or all of projects listed. Thus, there is no meaningful discussion provided of the implicit "options" and "opportunities" that would contribute to further increases in area-wide air pollution, risks and hazards, thus cumulative impacts to Public Health and Public Safety.

The effect of the Phillips 66 Santa Maria Refinery Rail Spur Expansion Project, the WesPac oil terminal plan for Pittsburg, the Targa Resources plan for an oil terminal at the Port of Stockton, and the plans for a large oil terminal at Bakersfield, would each, if constructed, contribute to cumulative and significant increases in emissions from marine and locomotive diesel/GHG emissions in the region. Kinder Morgan's rail terminal facility in Richmond is already a source of regional and local cumulative air pollution from its rail imports/exports of ethanol, crude oil and LPG, including Bakken oil transfers from train tank cars to oil tanker trucks destined for Tesoro's Golden Eagle Refinery in Martinez. BNSF trains carrying Bakken destined for Kinder Morgan's Richmond terminal would travel through Benicia. Phillips 66 Refinery in Rodeo is planning for more rail export of propane and other liquid (explosive) gases. Current operations at Phillips 66 send BNSF trains loaded with LPG/propane along UP tracks bordering the south side of the Carquinez Strait and

are regularly side-lined in downtown Martinez and near I-680. Each of these projects and existing operations would increase rail transport of dangerous crude oil and LPG within the region and thereby increase diesel/GHG emissions.

d.) Examples abound of why the Draft Report cannot be considered a complete tool for public understanding of the full scope and extent of the Project and its impacts. How might the Valero CBR Project tie into that much larger picture of regional and state "options" discussed in the media and industry reports for delivery of North American-sourced crude oil to West Coast refiners and planned oil terminals?

As cited elsewhere in this Response, Valero could take advantage of various options for import and/or export of similar quantities of Bakken or tar sands crudes within the framework of the Project. Why not?

e.) What does Solano County's 2012 Transportation Plan have to say with regard "rail safety" for Solano communities and environs concerning the expected increase in both manifest freight, passenger service and hazmat- and crude-loaded trains running on UP tracks through the county?

f.) Risk comparisons create misleading conclusions: In the downplaying of risk associated to rail transport of Bakken oil, the DEIR's various risk analyses could give rise, as certain Valero presentations have, to fallacious conclusions about impact significance. For example: a 50-car Bakken-loaded unit train would likely present a greater level of risk as a manifest mixed freight train carrying flammable ethanol or other similarly combustible liquid fossil fuels (LPG). It should be made clear in the DEIR: although rail transport of other flammable liquid fossil fuels (ethanol, butane, propane, etc.) continues to serve refineries' and fuel suppliers' import and export needs, those tank cars with their dangerous liquid cargo are not routinely assembled into 100-car or 50 car unit trains but are more often dispersed in manifest trains with buffer cars segregating the tank cars loaded with LPG. Manifest trains, with up to about 35 freight cars, are what we have seen in the Benicia Industrial Park making routine pickups and deliveries of a variety of products, (including beer). How many manifest freight trains enter and leave the Benicia Industrial Park on a daily and weekly basis?

The increasing volumes of crude oil delivered throughout California by 50-100 car unit trains composed of "Legacy DOT-111s" that have been designated "not safe" for carrying crude oil and other flammable hazmat, must be of singular concern to every municipality passed through by such trains.

Benicia, the proposed point of arrival for receiving a total of 100 crude-loaded tank cars arriving daily via two 50-car trains, 365 days per year, can also expect to have crude unit trains running through the Suisun Marsh on UP's main tracks enroute to Phillips 66 Santa Maria refinery, which is becoming a rail terminal for offloading Bakken or other North American-sourced crudes (tar sands) for subsequent delivery via pipeline back up the Central Valley to Phillips' Rodeo refinery. Would BNSF trains be composed of Bakken-loaded "Legacy DOT-111s?"

g.) The lack of full disclosure and consistent underestimation of risk and hazards associated to rail safety and probability of train derailments is made perfectly clear in the analysis provided by experts for Impact 4.7-2 [Hazardous and Hazardous Mat'ls, 4.7.6. Discussion of Impacts and Mitigation Measures, p. 4.7-18] The DEIR first assumes the voluntary use the CPC-1232 tank cars, declaring them "safer," which has not been proven since the Lynchburg VA derailment and Bakken explosion involving 1232's. The DEIR's use of the modest scenario for a crude train derailment and its "once-in-a-hundred eleven years" risk assessment is highly misleading, given recent history of catastrophic crude train derailments. The DEIR's list of those derailments is limited to those involving Bakken [Hazards and Hazardous Materials, Regulatory Settings 4.2.7.2.3, p 4.7-8]. Therefore, the list is incomplete (see this Response, Section 8).

In any case, what purpose does a modest derailment scenario serve public understanding of the full scope, extent and degree of risk and hazards posed by the Project's rail activities?

The chosen model risk scenario – a hypothetical "real life" situation posing the probability of a single loaded crude train's derailment involving a modest spill of 100 gallons of oil occurring somewhere between Union Pacific's Roseville's rail hub does not entertain any other complicating circumstances that would increase the risks and degree of severity of such an accident. For example, a risk model that demonstrates possible cumulative effects of an even minor derailment should show what could happen if the derailment occurred at an at-grade level crossing in Davis or Sacramento or Suisun. Such a minor accident can turn to "major harm" if a vehicle or pedestrian or cyclist is involved in the accident.

h.) The DEIR must disclose a foreseeable, "credible worst case" based on recent history of catastrophic derailments and spills involving Bakken and tar sands.

9. SEVERITY OF RAIL DANGERS POSED AND EMERGENCY RESPONSE:

a.) A plethora of recent evidence and reliable research[22] supports mounting local, regional, state and national concerns about the lack of rail safety[23] given the July 2013 to May 2014 record of catastrophic train derailments involving Bakken explosive fireballs.[24] The severity of the dangers of such conflagrations and lack of viable, feasible emergency response in recent cases, especially in rural areas, are well documented.

b.) Should a major catastrophic derailment occur within the Industrial Park involving a Valero crude train spill or fire, key infrastructure could be impacted. Use of Industrial Park roads, I-680 "fly over" ramp, Bayshore Rd freeway exit ramp, and three bridges could be impacted. The infrastructure itself could be damaged. Fire can spread. Because of the compactness of the area bounded by Bayshore Rd, Park Rd., Industrial Way and the

[22] Oil Change International, priceofoil.org/2014 Runaway Train: The Reckless Expansion of Crude-by-Rail in North America - Oil Change International
[23] "Oil by Rail Safety in California: Preliminary Findings and Recommendations," State of California Interagency Rail Safety Working Group; June 10, 2014
[24] Ibid.

Refinery, and the obvious existing hazards within that tight area, a fired caused in a train derailment can spread especially if fueled by fugitive emissions/gases that ignite. It has been acknowledged by Valero manager John Hill, when questioned during a recent tour for Valero Community Advisory Panel members of the Project site, that 50-car trains, maneuvering from UP's main track to switch onto the Industrial Park's rail spur paralleling Bayshore Rd., would likely have to back up almost all the way to the west-bound Benicia-Martinez Bridge to make the switch. Bakken-loaded crude trains would thus risk the entire area, including the Refinery.

The proximity of the rail off-loading racks on Valero property would be squeezed between giant storage tanks and other trains sidelined (LPG) for refined products and raw materials. The DEIR must account for a *credible* worst case scenario of fugitive gases igniting during an off-loading of Bakken crude. The DEIR must disclose information about tank storage "floating lids" and closed dome lids and their vulnerabilities to leakage of volatizing gases.

The DEIR fails to fully describe the kinds of vulnerabilities and risks that are entailed in the off-loading of very light volatile crudes – especially Bakken – and the conditions that may develop during off-loading procedures, in the case of volatizing gases from spills of Bakken.

The DEIR describes a berm that would be constructed to handle a spill of (only) one train car's volume of oil. The DEIR must describe the expected conditions during such a spill, the possible impacts of volatizing gases and their chance of ignition from any source in the vicinity, including sparks from friction of metal-on-metal of train couplings. A larger spill must be envisioned involving more cars. This was an issue raised in Scoping that the DEIR fails to address.

c.) Valero's Emergency Procedures Manual is not specific to answering community concerns for the kinds of rail accident scenarios that could foreseeably occur in the Industrial Park at or near Park Road's at-grade rail crossing. Official local emergency response plans for access to the Industrial Park in case of a train delay or accident at Park Rd. are cursorily cited in the DEIR's chapter on Traffic and Transportation in relation to a rather strangely worded Impact 4.11-4: *"The Project would not result in inadequate emergency access."* Installing cameras is hardly a mitigation measure that would serve Emergency Response in the case of a catastrophic accident that might render the cameras inoperable.

It is worth quoting the response provided by Mitigation Measure 4.11-4:

> "Coordinate with the City of Benicia Fire Department to finalize the City of Benicia Fire Department/Valero Benicia Refinery Fire Department Operation Aid Agreement ("Agreement") to be implemented in the event an emergency occurs during a Project train crossing. The "Agreement" shall provide methods of adequately informing the Fire Department of the expected train crossing schedule and alternate routes to access the Park Road and Bayshore Road industrial areas during the event that a train crosses Park Road. In order to inform Benicia Dispatch of a train crossing during an emergency, Valero shall provide, install,

> and maintain camera(s) at specified location(s) determined by the City, with coordination from Valero. The camera shall meet the City's standards and have a real-time connection to Benicia Dispatch. The camera connection will signal to Benicia Dispatch that emergency responders shall use East 2nd Street as the identified alternative route to the Park Road and Bayshore Road industrial areas. East 2nd Street was identified for its direct access to area and the Opticom system in place at all signalized intersections. . ." [p. 4.11-12]

The public can't know from reading the section of Valero's Procedures Manual reproduced in Appendix G whether those procedures and call for forming a central command would address a catastrophic fire *occurring in a crude-loaded derailed train* in the Industrial Park at Park Road's rail crossing or along UP's rail spur along Bayshore Road, or on UP's main tracks in the Suisun Marsh. Same for the problem of cleaning up a significant spill of tar sands if such an accident occurred near Sulfur Springs Creek next to the rail offloading racks, or in Suisun Marsh, wetlands and fragile shorelines. The DEIR does not entertain credible worst case rail accident scenarios that could happen in the Benicia Industrial Park. Why not?

d.) The DEIR hardly considers the problem of emergency response that would be called for beyond the Refinery's rail offloading terminal and the immediate environs of the Benicia Industrial Park. Why? The DEIR's clear avoidance of the discussion suggests that such accidents if they occurred would become the problem of local jurisdictions dealing with Union Pacific Railroad. For Benicia's protection from minor or major rail accidents, the DEIR seems to assume that the Valero Fire Department's team in coordination with the City of Benicia's Fire Department would efficiently handle an accident, although discussion of a catastrophic fire scenario is not included. Appendix G., "Valero Emergency Procedures Manual, Sections 203 and 206" provides less than a page and a half summary of established protocols for notification to the City of Benicia by Valero in the case of need for emergency access owing to problems at the Park Rd rail crossing in the Industrial Park. The sections cited were issued in April 2011, more than a year before the VCBR Project Application was submitted to the City.

e.) Union Pacific's Hazardous Material Emergency Response Plan in Appndix H is dated October 1, 2009, is hardly inspiring of confidence. The UP Plan was clearly not written with crude unit train explosive rail car derailments in mind. Further, it is not clear whether it is being presented in the DEIR as a mitigation plan. If it is, then it has not been prepared to address specific hazards or rail accidents foreseeable that would be particular to the VCBR Project's operations and rail activity within the City of Benicia or uprail.
A revised DEIR must include an updated, current, 2014 Emergency Plan from UP that would specifically address likely emergencies, minor to major, that could result from implementation of the Project. The DEIR must describe what those emergencies could be.

f.) The Benicia General Plan, Policy 4.22.1 states: "Provide an early community alert and notification system and safe evacuation plan for emergency accidents."

Policy 4.22.3 states: "Provide the public with information on specific emergency evacuation routes."

Program 4.22.E states: "Provide an evacuation route from the Arsenal in addition to Military East."

The DEIR must identify the impacts and mitigation measures that would account for the severity of potential rail accidents within the Industrial Park or Port area and incorporate General Plan policies and programs in designing specific emergency measures appropriate to specific risks and hazards identified.

10. CONDITIONS IN THE BENICIA INDUSTRIAL PARK – EFFECTS OF THE VCBR PROJECT ON TRAFFIC HAZARDS AND LAND USE:

a.) The City of Benicia has agreed that the current conditions in the Industrial Park need improving in the zone designated "general industrial," which is east of the Refinery (asphalt plant, processing block, tank farm, pipelines following Park Rd., and the proposed new rail spurs and rail offloading terminal on Valero's eastern-most boundary).

b.) It's not difficult to imagine or foresee how the perceptions of safety and attractiveness of the "Benicia Industrial Park Bus Hub," [Traffic and Transportation,4.11.2.1.Current Conditions, p. 4.11-2] planned for an empty lot located along Industrial Way just past the Park Rd. intersection and RR crossing, would be compromised by Project rail operations. Each day, commuters and bicyclists arriving at the Hub to "park and ride" would be expecting bus transit and ride-share options that could be held up by traffic complications at Park Rd., especially depending on daily train movement activity, let alone, if there was a VCBR Project-related delay, problem, major or minor rail accident in the vicinity.

Allowing two dangerous 50-car crude-loaded unit trains on a daily basis to enter the Industrial Park, with two "empties" departing, with UP in charge of all train scheduling and train movements, threatens to degrade conditions within the park generally, creating what could appear to be, over time, a land use precedent set by the Valero Project: in practical effect, a UP rail yard parking lot for trains, a "L.U.L.U." – a Local Undesirable Land Use.

However, the DEIR asserts that the Project's train movements would not significantly impact local traffic, nor mentions any possibility that UP could sideline trains within the Park, if scheduling runs afoul of the desired train delivery "window" or there is any disruption along UP's main line. Existing traffic tie-ups, safety threats, and daily, disruptive inconveniences to businesses along Bayshore Rd and Industrial Way caused by freight train movements are existing constraints on the Park's attractiveness to new business.

An inadequate and inaccurate Transportation & Traffic Impact 4.11-5 claims the Project "would not conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such

facilities." The Significance is determined to be "Less than Significant" with no mitigation required. However, there are no specific projects, plans or programs that are named.

If the VCBR Project is permitted, "optimal" off-peak scheduling of 50-car crude unit train passing through the area and Park Rd intersection cannot be counted on. As previously discussed in this Response, The DEIR assumes that crude-loaded trains would be arriving into the Park at "requested" off-peak hours, although the DEIR doesn't inform the reader that there can be no guarantee of "on time" train arrivals and departures. For the Bus Hub, sidewalks are to be built; bike riders are to be encouraged to use the Hub's park-and-ride option, along with those arriving in cars. There are spaces planned for 50 vehicles and a food catering truck. How would a Project-related train accident or emergency affect the functions of the Bus Hub. In any case, the VCBR Project's four daily trains, "loaded" and "empty," would *add* to daily cumulative risks posed by existing rail freight traffic in the industrial park to Park occupants and users, including those people who would use a future Bus Hub facility on Industrial Way.

11. COMPARING THE DEIR AND THE INITITAL STUDY – LITTLE DIFFERENCE:

a.) In July, 2013, the Initial Study/Mitigated Negative Declaration [IS/MND] was soundly rejected by the public as a gloss on the Project's potential to "do harm" to our local community and environment, as well to "up rail" and downwind" communities and the sensitive landscapes and waters located along rail lines over which crude-loaded unit trains would travel. It was apparent then that the IS/MND's creation was directed toward Project approval.

Obviously, the Valero Crude By Rail Project represents much more than a local "rail logistics operation" confined to rail off-loading procedures on Refinery property, as Valero management first characterized the physical elements of the Project plan, when they first began to introduce the Project to the public in early 2013. More than a year after the withdrawal of the IS/MND, the DEIR, released on June 17, 2014, still bears the stamp of the original review and its overall conclusions. Little in the DEIR has changed overall from the Initial Study's Environmental Checklist's limited assessment of local impacts. The DEIR is full of descriptive boilerplate and repetitions; however, there is little or no integrated discussion that reveals how the information about "regulatory settings" and other regional, state and federal environmental regulatory frameworks ultimately affects the DEIR's evaluation of potential impacts.

For example, in Biological Resources section on the Suisun Marsh [Section 4.2.4.2], Impact 4.2-6 considers the increased noise effects projected by increased numbers of trains running at night that could adversely affect "special status wildlife species in the Suisun Marsh disturbed by an increased frequency (high traffic volumes) of railcars through the Marsh." The DEIR's summation of impacts are wildly speculative based on unsubstantiated, anthropocentric (and dismissive) assumptions about birds' ability to adapt

(as if to say "they should" adapt, like humans?) and questionable claims for "sound attenuation."[25]

b.) The full scope of the Project and its physical extent is still not identified. Where does the Project begin and end? This was a Scoping issue. There is still no answer except avoidance and/or dismissive gestures toward such suggested scope. The DEIR ventures to discuss "uprail" impacts using minimal risk scenarios. This is to discount populations put at risk and dismiss drastic environmental effects. The DEIR invokes limits of CEQA that allow for attenuated analysis of rail safety impacts that would exist beyond Roseville to the California border. The risks posed by crude-loaded trains running between Roseville UP hub and the Valero Refinery are also minimized, justified by specious statistical analysis.

The DEIR may be a more elaborate document but its descriptions and hollow conclusions are no more valid than those presented in the IS/MND.

12. "BRINGING HOME" THE ADDED DANGERS AND DAILY RISKS OF CRUDE-BY- RAIL AND THE IMPACT ON GLOBAL WARMING:

The DEIR offers the most fatalistic and dismissive sentences in the DEIR regarding the global crisis at hand, the workings of "business-as-usual" and projected "irreversible environmental effects," the topic of Chapter 5, Section 5.2 [p. 5-1]:

> "The Project would involve the continued use of nonrenewable crude oil supplies by the existing Refinery. At some point in the future, the supply of crude oil available by railcar would presumably become exhausted. This will occur, however, with or without the Project. The Project would not involve any increase in the use of crude oil by the Refinery. Rather, the Project would merely substitute North American crude oils for other crude oils from around the world."

a.) Several commenters at the planning commission hearing on Aug. 14th, who identified their support of the Valero Project, spoke of the advantages of the VCBR Project "to get the U.S. off dependence on foreign oil" and "prevent wars that are fought to ensure US oil supplies" [our paraphrase]. Although such "advantages" are not CEQA issues, they do raise the specter that the U.S. and Canadian governments, through NAFTA, are "bringing home" to local populations and environments across both countries the dangers of the hugely carbon-and resource intensive extraction processes to get at either "tight oil" and/or "tar

[25] DEIR p.4.2-3. Biological Resources, Suisun Marsh – the following is stated, "The Project would not increase the lateral are of disturbance that extends approximately 200 meters from the railroad alignment, relative to baseline conditions, since this is determined by physical laws of sound attenuation. The addition of four trains would increase the number of intermittent disturbances by 9.5%. Perhaps more importantly, if all four trains were added during nighttime hours when presently only about 7 trains run, the percentage increase of train cars running during nighttime hours would be closer to 60%. However, it is reasonable to assume that there would continue to be long periods of silence punctuated by intermittent, and relatively short, periods of train disturbance. Thus, while the increase in train traffic may initially have a slight negative effect on nearby wildlife species, they are expected to soon habituate to the increased noise. The impact is less than significant, and no mitigation is required."

sands" via hydraulic fracturing of shale rock in North Dakota's Bakken formation, and stip-mining and *in-situ* mining in Alberta's tar sands.

b.) The DEIR drastically limits its discussion of Project contributions to GHG accounting only those diesel emissions that might be saved by substituting rail for ship deliveries. But those calculations are designed to reflect the statement quoted above: the Project would "merely substitute North American crude oils for other crude oils from around the world."

The use of the word "merely" is key to the level of dismissiveness of the claims in this DEIR that would have the reader believe that, all things considered and wrapped up, there are no reasons to consider the Project's proposed connections to the most destructive and carbon-intensive mining operations on the planet, in North Dakota's Bakken shale plays and in the vast network of mines in Alberta's tar sands. North Dakota has been transformed into a mining wasteland from hydraulic fracturing whereby thousands of wellheads are created, where water and toxic chemicals are mixed to be powered into the ground to release oil as light as gasoline trapped in shale. In Alberta, oil industry majors and energy companies that are promoted and given tax subsidies by Canadian and US Governments have laid waste to a vast primal boreal forest, what was once considered a "carbon sink" but which is now a polluted zone of vast stretches of toxic tailing ponds and ruined lands, polluted aquifers and watersheds of three major rivers that flow to the Arctic. The devastation wrought, the resources wasted (natural gas, fresh water – 3 units of energy spent to extract one unit of energy) is part of the irreversible environmental effects of the VCBR Project, however benignly the Project is presented by the DEIR.

The foreseeable potential for marine vessel delivery of tar sands to the Benicia Refinery are part of the general flexibility that Valero seeks to maintain, keeping "options open." The daily extraction and distribution by rail, pipeline and ship of North American crudes, with increasing pressure from the industry to allow export of domestic crude oil, augers huge near-term profits for the oil industry and greater consumption of fossil fuels here and globally, thus perilously forestalling transition to a post-carbon future. The DEIR must give an honest appraisal of the predicament the Project contributes to. There is not more than a nod in the DEIR about state of California GHG reduction targets and why they are so important. There is nowhere in the DEIR where a reader can access any material or the most recent report by the International Panel on Climate Change [IPPC] and the evidence-based dire predictions for global warming effects owing to the continued and increasing burning of fossil fuels. [26] Greenhouse gases have accumulated at an accelerating rate and have passed the 350 parts per million level considered safe for life. In 2014, there has been more rapid acceleration of CO2 in the atmosphere, which has hit unprecedented levels of nearly 400 parts per million not ever experienced in human history.

Investigative journalist, Elizabeth Kolbert, reporting on Antarctic scientists' findings from ice core samples retrieved at the Vostok station from drilling 11,275 feet down into ice left

[26] http://mitigation2014.org/ IPPC. Climate Change 2014: Mitigation of Climate Change

from four previous glacial periods, has drawn a sobering picture from the sampling data's levels of GHG gases found trapped inside the ice core's frozen water molecules:[27]

> "What the Vostok record shows is that the planet is already nearly as warm as it has been at any point in the last 420,000 years. A possible consequence of even a four- or five-degree temperature rise – on the low end of projections for the end of this century – is that the world will enter a completely new climate regime, one with which modern humans have no prior experience. When it comes to carbon dioxide, meanwhile, the evidence is even more striking. The Vostok record demonstrates that, at 378 parts per million, current CO_2 levels are unprecedented in recent geological history. (The previous high, of 299 parts per million, was reached around 325,000 years ago). It is believed that the last time carbon dioxide levels were comparable to today's was three and a half million years ago during what is known as the mid-Pliocene warm period, and it is likely that they have not been much higher since the Eocene, some fifty million years ago. In the Eocene, crocodiles roamed Colorado and sea levels were three hundred feet higher than they are today."

Where are the physical boundaries of the impacts resulting from the Valero CBR Project? Under the regulatory framework and spirit of AB 32, the State of California's Global Warming Solutions Act of 2006, why does the DEIR not identify the extent of the "total reach" of global warming impacts that would result from the Project's implementation, direct and indirect impacts? Why no "cradle to grave" accounting of environmental risks and costs in the DEIR pertinent to GHG reduction targets aimed for by AB32? Given its reach back to carbon-intensive, resource-wasting, extremely destructive extraction mining operations in North Dakota, Texas and other Midwest shale plays and in Canada's tar sands, it would seem paramount to factor into the account of Project impacts the true environmental cost of domestic and Canadian mining operations – all of which greatly contribute to global warming and climate change – thus, those sources of unconventional, carbon-intensive crude oil that would directly supply the Valero Benicia Refinery on a *daily basis* through the VCBR Project's "logistics operation." What is the "off-set" for gross environmental destruction spurred by the Project's operation? It cannot be short-lived "economic benefits" of a boom-then-bust cycle of a declining industry that will surely be changed within a generation. As the Western States Petroleum Association has warned: demand for gasoline in California was "down by 20%" during the 2009 – 2012 "Great Recession" that also coincided with spiked costs of oil.[28] Young people are becoming aware of the vulnerability of the current oil industry regime and the need for transition away from runaway fossil fuel consumption. They know that precious oil must be left in the ground if we are to spare their children a future we of older generations would not want to bear, given predicted and already occurring disastrous global climate change effects.

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[27] Elizabeth Kolbert, *Field Notes from a Catastrophe: Man, Nature and Climate Change* 2006, Bloomsbury Publishing. p. 128

[28] Oil Price, "Why Recession always Follows Oil Price Increases," by the Oil Drum June 2, 2011.http://oilprice.com/Energy/Oil-Prices/Why-Recession-Always-Follows-Oil-Price-Increases.html

13. PROJECT ALTERNATIVES – LACKING FULL DISCLOSURE:
Project Alternatives are briefly described in the Executive Summary, and are similarly briefly discussed in a separate section, Chapter 6 Analysis of Impacts 6.1 – 6.4].

The rejection by (presumably) the Applicant, as well as the DEIR preparers, of certain Project Alternatives that were preliminarily considered as outlined in "Alternatives Considered but Dismissed from Further Consideration in this EIR" [6.3 Alternatives Analysis, p. 6-4, 6-5], present a case in point about the worrisome conditions for the Project location on Valero Refinery property. The Alternatives that were not presented in the Draft Report for lack of feasibility were rejected because of "insufficient space" (on Valero property at the Port of Benicia, or on AMPORTS property near the Benicia marine terminal). This "insufficient space" problem must be discussed in relation to the Project setting as described in the Project Description.

The preliminary dismissal of the Alternative described in 6.3.3 "Receiving Crude from the Proposed WesPac Energy–Pittsburg Terminal" appears to be based on requirements for extra CEQA review of any new new pipeline construction plan that would link the port at Pittsburg with Valero's port facility. Plans for a pipeline expansion project for the Carquinez Strait are outlined in the Contra Costa County Northern Waterfront Development Initiative adopted in 2012.

In any case, apart from questions of greater environmental impacts that would result from new pipeline construction, what might have been the more significant business factor in the rejection of the WesPac terminal option is the fact that Valero would have to assume responsibility for the pipeline construction under a cloud of uncertainty about whether the WesPac project is viable, given that company has suspended its Application and environmental review. Valero also communicates a sense of urgency about getting access to price-advantaged Bakken, the latter being the most likely factor in rejecting the pipeline alternative that the WesPac project represents.

e.) The DEIR **Project Alternative 1: Limiting Project to One 50-Car Train per Day** [ES-5] is said to be not feasible under the Federal Preemption Rule, because it would limit the number and volume of crude train deliveries, limiting the number of trains to one per day, (suggested to be scheduled at night). The Lead Agency has no discretionary authority to choose this Alternative (the red herring). Coincidentally, Alternative 1 would not be economically beneficial to Union Pacific. However, Alternative 1 would allow Valero to import up to 35,000 barrels of oil by alternate means of delivery other than rail. This is not mentioned as part of the DEIR's presentation of Alternative 1. Obviously, UP is the principal beneficiary of the rejection of Project Alternative 1.

Project Alternative 2: Two 50-Car Trains Delivered during Night Time Hours [p. ES-5] suggests having two 50-car trains arriving at night, with one train "sequenced" in after the other, or, a 100-car train could arrive and be divided for offloading. These proposals raise the question: how would a 100-car crude-loaded train maneuver into the industrial park and into the Refinery? A 100-car train would be approx. 7,800 – 8,000 ft long. Nothing is said about the problem of train movements and switching operations. Could a

100-car train be side-lined? Where?– at the terminal's "departure" spur? The main problem cited is excess noise at night from 100-cars moving in and out after 8 p.m. Has a noise study been done that would determine the effects at night?

Project Alternative 3: **Offsite Unloading Terminal** [ES-6] considers either a Valero- or third party-operated off-site oil terminal project, involving either "new or existing infrastructure, including whether this would be a new facility or an existing one, and how far away this facility would be from the Refinery." Table 5-1 [5.4.3 Areas of Potential Cumulative Impact] lists the WesPac oil terminal project proposed for Pittsburg that is currently under a suspended review procedure. As reviewed above, the reasons for rejection of this Alternative are explained more fully in 6.3.3. However, it's clear that there are plans for new pipelines to be constructed in the Carquinez Strait, according to Contra Costa County's 2012 adopted "Northern Waterfront Economic Development Initiative," which also echoes what a Reuters report from Houston, July 11, 2014,[29] outlines for the Port of Stockton: a proposed oil terminal that would serve Bay Area refineries and Asian markets.

> "Targa Resources Partners LP is seeking permits to start up crude oil rail-to-barge operations at the Port of Stockton in California and at the Port of Baltimore in Maryland. The proposed Stockton joint venture with TRC Companies Inc, if approved, would rail in 70,000 bpd to be loaded onto vessels for delivery to West Coast refineries. The companies haven't disclosed a target startup date."

The oil terminal proposed for the Port of Stockton is also cited in the Port of Stockton 2013 Annual Report - Investments and Development, as "approved by the State in 2011:"[30]

> "Targa Resources is also in the process of developing a 33-acre petroleum terminal and storage facility on the Port's East Complex. The project, approved by the State in 2011, includes 20 storage tanks with a total storage capacity of 850,000 barrels. This capital investment totals more than $320 million and creates 30 full-time positions."

Why did the DEIR not explicitly cite the plan for a large oil terminal at Stockton as relevant to the discussion of the feasibility of Project Alternative 3? The DEIR does not clarify that domestic and Canadian crude may become more accessible by marine vessel (small or large tanker and/or barge) in the near future. A revised DEIR must discuss the foreseeable conditions that would allow the Refinery to acquire those crudes by marine vessel that the Project, as currently described by the DEIR, seeks *exclusively* to access by rail.

The DEIR also mentions the additional CEQA review requirements for any additional permitting of such an "off-site terminal" and/or supporting components such as new pipeline. The DEIR suggests that Alternative 3 would entail more impacts than the

[29] U.S. crude-by-rail projects; Targa Resources proposes two oilports - Yahoo Maktoob News;
[30] http://www.portofstockton.com/wp-content/uploads/2014/06/Annual_Report_2013_low_rez.pdf Investments and Development

proposed Project and that those impacts would be effectively "transferred to another location."

The DEIR's discussion of the "**No Project Alternative**" [ES-5 Alternatives] briefly states that it would allow continued importation of crude by marine vessel and pipeline, without "reduction of marine vessel ships." Reduced diesel emissions from ship engines is explained elsewhere as a key benefit of the Project, such that the **No Project Alternative** is rejected as not providing that "green" benefit. However, the *prime reason* for its rejection is that if the Project is not implemented, Valero would not gain competitive economic advantage in accessing price-advantaged domestic and Canadian crude. Gaining "economic advantage" is implicit in Project Objectives.

Contrary to the DEIR's claims, the **No Project Alternative** provides protection from *additional* risks and impacts to public safety and public health. The City as the Lead Agency must not regard the factor of its own (speculative) economic benefit from the Project as a consideration in evaluating the Project's *totality* of potentially significant and harmful effects.

The No Project Alternative would be the only ethical choice to protect the safety and health of the Benicia community, ecologically sensitive marshlands and waters from dangerous hazards, risks and impacts, and to protect those communities and environs all the way "uprail" to the crude source that would be similarly threatened and potentially imperiled given the significant increase and intensity of risk posed by the Valero CBR Project's daily operations. We believe that the No Project Alternative is best for protection of local and regional air quality and ultimately, climate protection for all the reasons cited in this Response.

14. THE ENVIRONMENTALLY SUPERIOR PROJECT – NOT THE VCBR PROJECT AS THE DEIR CLAIMS:

a.) The uncanny determination that the Project itself represents the "Environmentally Superior Project" [ES-6] raises the specter that the DEIR's preparers have worked to ensure that the Project would be viewed as benign – environmentally safe, and even beneficial for climate protection by reducing greenhouse gases. Even if the methods used to compute GHG reductions were sound, given the particular leap to identifying the Project as "Environmentally Superior," the concerned reader must ask, *superior to what* – infeasible Project Alternatives?

b.) Because the DEIR underestimates potentially significant risks and impacts rendering them equally comparable as reduced to "insignificance" by clever calculation, there is no way to arrive at the conclusion that the Project itself can be recognized as "Environmentally Superior." For example, the DEIR fails to illuminate the foreseeable *additional* serious risks and hazards that would be posed to the Benicia Industrial Park and its occupants by Project operations, which if implemented, would compound the extraordinary and myriad risks to public safety and health on a daily basis, to which the Park and community at large are already exposed 24/7 by the Refinery itself. The DEIR's

presents the Project so benignly that it seems to say that all things pertinent to its evaluation have been identified and considered, with impacts "done with," so made to disappear. The DEIR reflects Valero's plea, recently spoken to a public audience, "Trust us, our job is to manage risk."

End of BSHC Section 1 (Overview of the DEIR)

PART II

Response to Specific Areas

Section 3	Fundamental Failures of the DEIR Analysis Involve Misstatements of the Law by the Applicant
Section 4	Response to Sections 3.1-3.7 of the DEIR (PROJECT DESCRIPTION)
Section 5	Response to Sections 4.1 and 5.4.3.1 of the DEIR (AIR QUALITY)
Section 6	Response to Sections 4.5 and 5.4.3.5 of the DEIR (GEOLOGY AND SOILS)
Section 7	Response to Sections 4.6 and 5.4.3.6 of the DEIR (GREENHOUSE GAS EMISSIONS)
Section 8	Response to Sections 4.7 and 5.4.3.7 of the DEIR (HAZARDOUS MATERIALS)
Section 9	Response to Sections 4.11 and 5.4.3.11 of the DEIR (TRANSPORTATION AND TRAFFIC)
Section 10	Response to Sections 4.2 and 5.4.3.2 of the DEIR (BIOLOGICAL RESOURCES)
Section 11	Response to Sections 4.10 and 5.4.3.10 of the DEIR (NOISE)
Section 12	Insurance (Substantive Area of Risk Not Addressed in the DEIR)
Section 13	General Requests For Information and Questions to the DEIR

SECTION 3: FUNDAMENTAL FAILURES OF THE DEIR ANALYSIS INVOLVE MISSTATEMENTS OF THE LAW BY THE APPLICANT.

The Applicant's analysis is distorted by its effort to conceal the composition of the products it intends to import over-land by rail. The analysis thereby ignores the fundamental question for the Public of whether *any* crude oil products should be permitted to enter Benicia by the new and untested method of rail transport.

First, the law applicable to these circumstances does not support any claim of trade secrecy. Secondly, the Applicant has conceded as *unenforceable* certain of it basic assumptions regarding ability to guaranty performance by third parties. Thirdly, the Applicant has flatly misstated the law regarding the applicable baseline conditions, which are required to be *existing conditions* under the law. These misstatements of the basic requirements of the law undercut all of Applicant's conclusions.

A. APPLICANT HAS NO PROTECTED TRADE SECRET.

The Applicant attempts to avoid discussing the dangerous qualities of the North American crude oil and tar sands it plans to import by claiming that the components of its products are protected as "trade secrets". The Applicant contends that revealing the source and quantities of its crude oil and tar sands would allow a competitor to reverse engineer their secret formulae.

- This concealment fatally undermines the DEIR analysis because the Applicant's fundamental argument is that the North American crude oil and tar sands it will import (as well as crude from other sources) will have essentially the same environmental impact as the raw materials now imported by sea. If this purported equivalency does not exist, all of the Applicant's baseline assumptions are flawed.
- On the bare face of the undisputed facts both the method of delivery and the imported materials will be vastly different.
- The Applicant quotes California Civil Code section 3426.2 (d) for the proposition that it can refuse to disclose the hazardous materials it imports. However no trade secrecy applies to commonly known facts because the value of the information comes "from not being generally known to the public or to other persons who can obtain economic value from its disclose or use" [See section I (4) (i) of the Uniform Trade Secrets Act][31]. Applicant proposes that the City ignore commonly known facts.
- The whole point of proposing the project at this time is to take advantage of cheaper North American crude oil at a time when pipeline capacity is limited and rail transport is the only real alternative. [See Wall Street Journal, November 12, 2011, "North Dakota

[31]Cal. Civil. Code § 3426.1(d) defines a "trade secret" as follows:
"Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that: (1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and (2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.
[31]

Oil Boom Spawns a Rail Boom"; "production of 1million barrels a day to double over next five years…pipelines at capacity."].

- New York Times recently confirmed that "rail shipments of crude oil … have surged since 2008 and [North Dakota] produces about a million barrels a day. About 60 percent of that oil travels by train from the Bakken oil fields …to faraway oil refiners. [New York Times, August 25, 2014 "Grain Piles up, Waiting for a Ride, as Trains Move North Dakota Oil"].
- Shipments of Canadian crude oil, including tar sand "dil bits", are also being shipped to remote refineries: "Oil-by-Rail shipments from Western Canada to triple in the next two years amid pipeline crunch" [Financial Post, August 12, 2014].
- The Applicant cannot deny it hopes to profit from these circumstances; indeed it proposes crude oil imports by rail of 100 tank cars a day. It is insulting to claim its plans are "secret". Applicant's list of available North American crudes includes 38 types and 33 of them are either Bakken or Canadian. (Table 3-1, page 3-23).
- Moreover, the type of imported raw crudes does not disclose how much of any particular crude is introduced into the final mix. All raw crudes may be stored in enormous and unknown quantities for an undisclosed time period at the facility, which can completely obscure the amounts of particular crudes in the mixture. Raw crudes are only one component in the chemical mix. Bulk measurements of imported crude oils are not covered by the trade secret definition.
- Applicant says that the 70,000 barrels of crude in those daily 100 car trains would be "from many sources" while admitting the sources are all North American.
- Applicant fails to acknowledge that daily deliveries of crude oil over thousands of miles of track is completely different, and much more difficult and dangerous, than the relatively short pipeline journey now taken between the tanker dock and refinery.
- In Appendix D, Applicant says "*Information regarding the crudes that Valero plans to purchase, crudes that have been delivered to the refinery, and the properties and measurements of crude blends processed by the refinery or suitable for processing at the refinery, provides an insight into Valero's operating strategy that would not otherwise be publically available*". "Insight into a strategy" is not the legal standard for a protectable trade secret. It does not reveal information sufficiently to breach the trade secret definition.
- The Applicant's plan to purchase and deliver crude by rail is limited to North American crudes. The North American crudes as a group are not homogenous. The widely variable composition of these crudes further undermines the claim of a "secret formula" and is information publically available or easily discernable from public information. The Applicant has made public ample information about the maximum daily delivery of bulk crude oils and its sources. Therefore the 'type' of crude material Valero plans to import is no secret.
- Applicant can store hundreds of millions of gallons of crude oils. As part of the Project the Applicant has already constructed new storage tanks. The Applicant has a legal duty to safeguard its secrets and can easily conceal its mixture formulae within the huge volumes of its stored raw materials. The Applicant is required to do so by Civil Code section 3426.2 (d) (2);
- The Applicant acknowledges that emergency legislation went into effect on January 1, 2014 requiring the Applicant to report its inventory of hazardous materials including

crude oil and tar sands. [Health and Safety Code section 25512] but fails to establish that the information qualifies as "confidential" under the law, because the information is reasonably concealable as well as commonly known.

- The fact that the monitoring agencies and emergency response teams involved keep this information "confidential " does not mean that they have conceded that any trade secret exists, rather they have little incentive to argue with the Applicant over the legal characterization. Their job is to have the information available for their own purposes, not to determine trade secret law as it applies to CEQA;
- For example, The Bay Area Air Quality management District (**BAAQMD**) has not challenged the Applicants "confidential" designation. Indeed, in its March 2013 Workshop Report[32], it states"…*a refinery owner/operator may designate as confidential any information required to be submitted under the rule that is claimed to be exempt from public disclosure under the California Government Code. The owner/operator is required to provide a justification for this designation, and must submit a separate public copy of the document with the information that is designated 'confidential' redacted:*
- The Applicant also attempts invoke the California Public Records Act (Government Code section 6254.7) to claim that its imports are secret. This is circular logic because the Act does not bestow secret status; it only says 'trade secrets…are not public records". Trade secrets are defined by Civil Code section 3426.1(d), discussed above. Applicant has not established that has any protectable trade secret in the vast amounts of crude oil it imports.

B. THE APPLICANT HAS CONCEDED THAT MOST OF ITS BASIC ASSUMPTIONS REGARDING RAILWAY OPERATIONS ARE UNRELIABLE BECAUSE IT CANNOT GUARANTY THEIR PERFORMANCE.

At the August 14, 2014 Planning Commission hearing, one of Valero's attorneys, John Flynn, spoke to the Commission and made the statement that the City could have " excluded impacts of rail operations from the DEIR altogether". According to Flynn, the City has no power to impose mitigation measures and conditions of approval on the project because railroads can only be regulated by the federal government.

Flynn said that "everyone in this room would agree that context is essential to any fair discussion…Half truths, of course, serve no purpose." However the half-truth he delivered had a clear purpose. It was intended to distract the Commission from an obvious question: isn't Valero also subject to the same limitations on its ability to control the railroad? The answer of course is YES.

Union Pacific Railroad Statement Re Preemption (Appendix L) is blunt:
"Union Pacific will not agree to any limitation on the volume of product it ships or the frequency, route or configuration of such shipments".

[32] Bay Area Air Quality Management District Workshop Report, Preliminary Draft Air District Regulation 12, Rule 15: Petroleum Refining Emissions Tracking, March 2013.

Valero cannot impose any obligation, contractual or otherwise, upon railroad operations. Valero delivers the crude oil to the railhead and pays for delivery. After that Valero has no more say than the City. Valero must disclose its agreements with the railroad because the impacts of the Project are all about the railroad performance.

- Valero cannot insist on a particular delivery/departure time for any of the 100 car trains; and it cannot control the switching of trains outside its own property.
- Valero's description of an orderly line of 100 car trains spaced 24 hours apart all the way up the 1500 miles to North Dakota, and arriving at a predictable time every day is pure speculation.
- Valero cannot prevent multiple trains from arriving close together and remaining for long periods on sidings outside Valero's property.
- Indeed, outside its own property Valero has NO CONTROL over how the railroad moves, stores or safeguards the 100 car trains.

All of the basic assumptions regarding railway operations predicted by Valero to occur outside the refinery property are conjectural. The traffic impacts discussed in the DEIR [5.4.3.11] provide a sobering view of Valero's unsupported predictions:

- Vehicle backups "associated with the 50-railcar crossing again would extend back onto the northbound I-680 off-ramp but not onto the I-680 mainline"; of course. Valero cannot control the speed or timing of switching operations.
- "During the 9:00-10:00 pm hour the resulting queues during a train crossing would be no longer than five vehicles"; this presumes the train does not stop or reverse on the road crossing; Valero cannot enforce that condition.
- Similarly Valero acknowledges that the "projected train crossings during the 9:00 AM-7:00 PM period…and the 7:00 PM -6:00 AM would generate queues" but provides no support for the claim that it can limit the worst delay to only 8 minutes; Valero has no control over train movements of off-site, where most of the switching will be done.
- Thus Valero claims that the increased "average" traffic delay in the area will be *less than one second* and is therefore insignificant. Valero does not describe how it will ensure, by contract or otherwise, that these estimates are accurate, because it cannot do so.
- Control over railroad operations is federally preempted for Valero just as though it were a person, or a City like Benicia.

C. THE APPLICANT HAS MISTATED THE LAW AND UTILIZED THE WRONG BASELINE THROUGHOUT THE DEIR.

In the "Areas of Controversy" section [Appendix C-1] the DEIR responds to the resulting increased pollution from the processing of "heavy Canadian crudes' as follows: "The City has considered this issue carefully, and reached the following conclusions:

1. There is no reason to believe that, if the Project is approved, Valero would be more likely to purchase heavy Canadian crudes than any number of other North American crudes that are lighter and/or sweeter;
2. Even if Valero were to purchase large amounts of heavy sour Canadian crudes as a result of the Project this would not cause an increase in emissions because Valero must blend

crude feedstock to a narrow range of weight and sulfur content before processing them; and

3. Even if refinery were to increase based on Valero/s purchase of heavy sour Canadian crudes, any such emissions increases would properly be considered part of the *baseline because the baseline includes the full scope of operations under existing permits that were issued based upon prior CEQA review".* [Emphasis added].

One need only read the news reports to know the first conclusion is false and the evidence supports the opposite conclusion (33 of 38 crudes listed are Canadian crudes, Table 3-1, page 3-23). The second conclusion depends upon an assumption contained in the first and third that is also untrue: that the blending of vast amount of heavy Canadian crudes somehow reduces their overall emissions. The third conclusion misstates the law.

- In support of its statement that "*the baseline includes the full scope of operations under existing permits that were issued based upon prior CEQA review".* [Emphasis added], the DEIR cites the California Supreme Court's leading opinion in *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 326
- The DEIR states what it claims to be the general rule: "as the courts have recognized, when an Applicant proposes to modify a previously approved project, the baseline includes the full scope of operations previously approved". [Appendix C 1-2]. Not true.
- The California Supreme Court Opinion in 2010 is paramount over the other cited Court of Appeal cases and it states the **opposite and correct general rule: that existing conditions are the proper baseline.**

The California Supreme Court opinion emphasized that existing conditions are the rule: "Section 15125, subdivision (a) of the CEQA Guidelines provides: "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. *This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant".* (citations omitted, italics in original) [supra, 48 Cal.4th 310, 321]

The Supreme Court dismissed the theoretical baseline now claimed by Valero by stating: " A long line of Court of Appeal decisions holds, in similar terms, that the impacts of a proposed project are ordinarily to be compared to the **actual environmental conditions existing at the time of CEQA analysis**…In each of these decisions, the appellate court concluded the baseline for CEQA analysis must be the 'existing physical conditions in the affected area'" [citations omitted] [supra, 48 Cal.4th 310, 321]. While there might be exceptions for good cause under certain circumstances, Valero has shown no such thing.

More importantly, the misstatement of the law is fatal to the DEIR responses to the "Areas of Controversy" in Appendix C.1 and C.2; when the correct law is applied, the responses are smoke and mirrors.

End of BSHC Section 3 (Fundamental Failures of the DEIR Analysis)

SECTION 4: RESPONSE TO SECTIONS 3.1-3.7 OF THE DEIR (PROJECT DESCRIPTION).

PROJECT DESCRIPTION 3.1 – 3.7

As stated previously in relation to the Executive Summary, the Federal Preemption Rule, which frames conditions of all rail activity associated to the Project, must be stated and explained at the beginning of the Project Description where it certainly belongs, given its fundamental importance to understanding the structures of authority that govern Project operations. Instead, Preemption is only mentioned in two sentences at the end of Chapter 3 [Project Description p. 3-27].

The consistent avoidance of any explanation of the terms and consequences of Preemption is reason for the DEIR's failure and requirement for recirculation.

A key *implicit* objective of the VCBR Project, well masked by the DEIR, is Valero's apparent intent to provide flexibility in determining transport "options" for importing North American-sourced crudes. For example: marine importation of Canadian tar sands at the Valero port could foreseeably become possible if marine delivery – whether from inland port terminals by barge, or tankers down the West Coast – is made possible in the immediate or near future. According to various industry sources, tar sands crudes are currently more difficult to access by rail, although more options for tanker and barge delivery may soon be opening up on the West Coast.[33]

Whether and how Valero could access tar sands is an option that needs to be discussed in the DEIR since such an option is possible under the framework of the VCBR Project. However, any increase in marine vessel deliveries to the Refinery of any raw materials for processing would upset DEIR evaluations for GHG reductions given the DEIR's claim of an 81% reduction of ship deliveries owing to Project substitution of crude deliveries by rail for equivalent volumes.

For whatever reason the Applicant has chosen not to discuss acquiring tar sands at this time under the Project, the DEIR must discuss the impacts of foreseeable changes in crude imports should factors of crude price, accessibility and availability change to Valero's advantage. Since such changes are highly plausible, the DEIR must identify and characterize the foreseeable risks and impacts posed by transport of tar sands by marine vessel, rail or pipeline and discuss these comparatively. Similarly, the DEIR must identify, characterize and explain the "extra processing" requirements for tar sands, for example, a requirement for greater amounts of hydrogen than for conventional crudes.

[33] Savage Services.com "Tesoro and Savage Announce Joint Venture to Construct and Operate Crude-by-Rail Unloading and Marine Loading Facility at Port of Vancouver USA. April 22, 2013 http://www.savageservices.com/pressroom/Tesoro and Savage Announce Joint Venture for Port of Vancouver Crude by Rail Project.html

A revised DEIR would have to disclose that changes in percentages and volumes of crudes imported by marine vessel would change estimates for GHG reductions. GHG calculations would have to be based on sound information and statistics, with current baselines, actual volumes of crude currently imported by marine vessel, etc., including the actual number of marine vessels (small or large tankers) that currently deliver crude to Valero.

The full spectrum of transport options available to the Applicant under conditions of the Project would mean that the limited comparison of GHG emissions from marine vessels and trains doesn't account accurately for GHG, since size of ships and volumes transported would have to be factored, let alone, the actual distances traveled to crude sources by either trains or marine vessels overall.

What the DEIR avoids discussing is the document's Achilles heel, an expression of the industry's mortality, its inevitable, continued decline now in a domestic "last bloom" phase: The DEIR does not explore the industry-wide vulnerability around critical assessments (skepticism) concerning future continued availability over time of currently available and favorably discounted North Dakota's Bakken oil or Canadian tar sands. Oil industry suppliers are aware of the fragile economics and "market forces" surrounding the current North Dakota "glut" of Bakken oil. Those pressures are widely accounted for in such mainstream media sources as the Wall St. Journal, Bloomberg News and Financial Post as well as many other industry watchdog sites online such as Carbon Tracker, which advises oil industry investors of the inherent risks they take given prospects for "stranded assets" – oil left in the ground for reasons of rising capital costs for extraction, development, exploration, etc.[34] The Benicia Independent, (Beniciaindependent.com) provides an excellent independent online resource for local residents and regional neighbors seeking up-to-date information published by major media on national, state and regional crude-by-rail issues. Such sources provide missing background for evaluating the Project and its viability over time.[35]

The number of ships that the Project would be replacing is not stated. Why?
The fact that we cannot trust the method by which the GHG reductions were calculated in the first place doesn't preclude considering the larger question of whether there could be *increases* in GHG emissions if more marine vessels and fewer trains were deployed to deliver North American-sourced crude to the Refinery sometime in the near future.

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[34] Carbon Tracker: Unburnable carbon 2013: Wasted capital and stranded assets. http://www.carbontracker.org/site/wastedcapital
Oil Change International; http://priceofoil.org/
Ceres, Boston MA Oct. 24 2013 – "Investors ask fossil fuel companies to assess how business plans fare in low-carbon future. https://www.ceres.org/press/press-releases/investors-ask-fossil-fuel-companies-to-assess-how-business-plans-fare-in-low-carbon-future?gclid=CNyF9ZrwxsACFRFcfgodcYMAIA
ASPO International/peakoil.net Association for the Study of Peak Oil, Sept 2 2014. http://www.peakoil.net/headline-news/clouds-on-the-horizon-for-fracking-companies
Post Carbon Institute, Jan 12, 2014 http://www.postcarbon.org/blog-post/2042660-shale-gas-peak-oil-and-our

[35] Wall St. Daily, WSJ; Adapting to the Shriveling Oil Market. Sept. 5, 2014

Considering the fragility and on-going volatility of oil markets and contradictory estimations for shale reserves' potential asset recovery and the continuance of current favorable pricing, perhaps Valero doesn't look beyond a few years. However, these "beyond CEQA" economic considerations are implicit in Project Objectives and would likely color projections for determining an estimate of the Valero CBR Project lifespan as well as near-term and future Project-related environmental impacts and risks to public safety and public health. (see this Response, Section 2, Subsection 6)

a.) What is the Project's lifespan? A project's timeframe, beyond construction phases, is a typical CEQA topic for development projects of a magnitude that would foreseeably result in serious adverse and significant impacts, which may increase cumulatively over time. The DEIR curiously omits any discussion of the Applicant's expectations for the Project's operational "life" or duration. Why is this? The DEIR nowhere references the topic, yet specific questions are posed by Scoping Comments about the Project's intended life-span.[36] There is no reason that the Applicant's aim to enhance "options" for transport and processing should prevent or proscribe DEIR discussion of the Project's operational life-span.

The regulatory framework for the Project is in the midst of major rule changes expected within the first two years of the Project's proposed construction. Those changes in requirements would likely affect DEIR estimates and evaluations of impacts during initial years of operation. (see this Response, Section 2, Subsection 3)

To evaluate the full scope of the Project's effects, decision-makers and the public need to know the Project's projected life-span to enable evaluation of the amount of added cumulative daily risks to safety and public health posed over a given time by the "Project impacts + Refinery impacts" that the community would endure given that the likelihood of serious consequences to public health and safety (Refinery processing accidents, emissions increases and rail accidents) would also foreseeably increase and accrue over time, as well as risks and dangers of spills in Sulphur Springs Creek and Suisun Marsh that would also affect Suisun Bay.

b.) The procedures for off-loading crude from 50 tank cars is described in such a way as to seem "risk free." [Project Description, 3.4.2.1] Especially given the proximity of the crude offloading rail racks to Refinery storage tanks (just above the terminal to the west) and to Sulphur Springs Creek, (immediately beyond the terminal and Refinery fenceline to the east), it is disconcerting that there is no particular description of potentially serious accidents and the possible degrees of their severity, should Bakken or tar sands be spilled, let alone, if a "Bakken fire" occurs at or near the Refinery in a major derailment scenario. (see this Response, Section 2, Subsection 9)

The Draft Report must address a foreseeable *credible* "worst case" scenario that would take place in the Industrial Park, for the sake of public protection and emergency planning. The DEIR describes that the berm constructed to catch potential spills at the proposed rail

[36] See Scoping Report – pages 638, 608, 622, 857 – where the question of the Project lifespan is raised in comments on the IS/MND and is of obvious concern.

off-loading terminal on Refinery property would be constructed to contain about 1-1/2 tank cars of crude spilled. If there were to be more tank cars involved in the vicinity of the terminal, severe impacts to Sulphur Springs Creek could occur. There is currently no gate installed (as was historically true) that would possibly prevent spilled volumes of oil from flowing into Suisun Bay. Wildlife inhabits the area and fish, frogs and other critters wander "up stream" toward the area of the proposed rail terminal. The DEIR must estimate the risk without underestimating the spillage (or fire and explosion) possible.

c.) About crude quality: The DEIR's discussions on the subject of the crude slate's optimal "blend" characteristics do not account for the array of other chemical constituents of those imported crudes that could potentially affect processing, increase emissions and risk increased corrosion, accidents and fires.[37] Claiming federal protection for Valero's proprietary trade secrets concerning chemical constituents ("qualities") of crudes that would likely be imported by the Project, the DEIR limits and/or avoids disclosure of specific information on qualities of available domestic and Canadian crudes. Yet such pertinent information can be found in the public domain online and is, therefore, "no secret."[38] The DEIR's avoidance of any specifics that would bear on impact analysis points to a primary defect: the Draft Report cannot be considered sufficiently complete as CEQA requires for public understanding of the full extent of Project operations and the nature and severity of its potential impacts.

It is published information that other regional refiners are currently processing Bakken oil and Canadian tar sands.

The pretense that the DEIR maintains about trade secret protections only adds to the deceptions of the Project Description. Bakken and tar sands must be discussed in regard their specific properties, especially considering that the percentages of each crude included in the daily throughput could increase variably.

The DEIR's claim that information regarding a specific crude's characteristics is proprietary business information protected under trade secret law, is confirmed by the SJM McGovern Report, which was submitted directly to the City and dated June 11, 2014, by Dr. Stephen J. McGovern, PE,. The McGovern Report is reproduced in Appendix K. The Report and the DEIR's reasons for non-disclosure of crude qualities rest erroneously

[37] See Phyllis Fox Report on the IS/MND; also Ms. Fox's Comment Letter on the Valero CBR Project DEIR.
Appendix B. CD ONLY "Scoping Report;" scroll down until it is located. The Report was not submitted as part of Scoping, so it should be relocated to its own Appendix in a revised DEIR.

[38] Examples: for tar sands "Cold Lake" Material Safety Data Sheet: msdsonline.com https://msdsmanagement.msdsonline.com/pdf/?libraryID=HTT725&pageID=3&nw=true&autoOpen=false. Also, from Crudemonitor.ca. Characteristics of Bakken oil can be found in Congressional Research Services "Crude Oil Properties Relevant to Rail Transport Safety: In Brief, Feb. 18, 2014; https://www.hsdl.org/?view&did=751042. Also, WSJ, "Bakken Shale Oil Carries High Combustion Risk" Feb.23 2014, http://online.wsj.com/news/articles/SB10001424052702304834704579401353579548592. Also, Crude Oil Material Safety Data Sheets, "Bakken Crude Oil" from Keystone XL Pipleine Project doc, "Appendix Q." http://keystonepipeline-xl.state.gov/documents/organization/221243.pdf; also MSDSonline.com; https://msdsmanagement.msdsonline.com/msdsonline-search/?SearchTerm=BAKKEN+CRUDE+OIL&SearchSuggestID=0&ReturnNarrowResults=true&NarrowFil

on federal trade secret law, which the Applicant states protects the corporation's competitive edge in the market. Yet this withholding denies the public specific information that would give insight into the degree of difference represented by unconventional oils being sourced from domestic shale formations and Canadian tar sands that would be relevant to evaluations of risks, public health and public safety hazards and threats to the environment resulting from spills and/or fires and explosions, either during transport, offloading, storage or during Refinery processing.

Valero management has publicly spoken of the feasibility of blending and processing a variety of North American-sourced crudes. As listed in the DEIR, [Table 3-1, Available North American Crudes] there are 38 crudes that could be imported that Valero insists would be able to "fit" into their daily blends' "range" of API Specific Gravity and TAN that would match the current configuration of the Refinery. Of the 38 listed, only 6 are from the U.S., including Bakken oil from North Dakota's Bakken shale formation and Texas' Eagle Ford, also extracted from shale rock. Both of these crudes, termed "light tight oil" by the industry, are right now abundantly available. At this time, Bakken is said to be favorably priced (or discounted) relative to other domestic sources. In various public statements, Valero has admitted that Bakken oil is a very likely choice for import under the Project, and the DEIR says the same. Given its relative pricing advantage, availability and accessibility by rail, what's left for the DEIR not to say about Valero's intent to access and process Bakken – the date at which the VCBR Project would be said to be able to begin to receive deliveries?

However, among the 38 crudes named in Table 3-1, there are 22 from Canada – much heavier and "dirtier" varieties developed from Western Canada's tar sands deposits, those crudes generically called "tar sands." All tar sands crudes, such types as Western Canada Select or Cold Lake, are "developed" oils, e.g. created by taking very heavy, metals-laden, tar-like viscous bitumen derived from Alberta's vast tar sands deposits and mixing it with other lighter liquid petroleum products, thus involving a secondary "upgrading" process to liquefy the bitumen enough to allow it to flow for transport via pipelines, railcars or marine vessels for delivery to refiners.[39] Known chemical constituents of various tar sands dilbits besides great amounts of sulfur are toxic heavy metals including arsenic, cadmium, nickel, vanadium and lead.

The DEIR avoids discussion of tar sands almost completely, despite the fact that under the Project's built-in flexibility for transport options and the indefinite Project timeframe, importing tar sands could certainly become a live "option" even within a year of Project construction that would provide for rail imports.

The VCBR DEIR refers to objectives of the Valero Improvement Project, permitted in 2003, that were described in the VIP DEIR of 2002, which sought to maximize flexibility

[39] "Tar Sands: Dirty Oil and the Future of a Continent," Andrew Nikiforuk, 2010; David Suzuki Foundation; a highly informative resource on tar sands mining and its consequences from Canada's preeminent investigative journalist living in Calgary.

to allow for processing "crude blends that are heavier and more sour than previous blends, reduce the use of gas oil as a feedstock, and increase the maximum crude oil throughput." [Project Description, 3.3.2.1. Crude Oil Processing, p. 3-12]. This statement invites the inference that given other factors, Canadian tar sands would likely be imported by the Project sooner or later, as the Goodman Group projected in comments submitted on the Initial Study in 2013.[40]

However, the DEIR sows confusion regarding the range of "flexibility" the Project allows and what risks such flexibility portends for both rail transport and processing of "likely crudes" to be imported. Foreseeable operational effects on public safety and health, both locally and regionally, potentially pose substantial risks to humans, wildlife, air quality, sensitive lands and waters and the climate owing to Project operations, whether in the immediate months of construction and post construction, and thereafter, over time.

The DEIR shows on several graphs the ranges of weight and sulfur content of crudes that the Refinery is configured to process and has been historically delivered, and also all others available on the West Coast to refiners and their locations on the "sweet to sour" graph scale. In the second figure, North American crudes that are available by rail are shown on a similarly scaled graph. It appears from a reading of both graphs that Valero is able to make crudes that lie "outside" the range of their optimal feedstock blend "fit" into it, since, according to the graph, the Refinery has taken delivery of a number of crudes sourced "outside the blend box." [Figure 3-9 West Coast Crude Deliveries Compared to Valero's Typical Crudes and Blended Crude Feedstock Capability; Project Description 3.3.2.2. Crude Feedstocks, p. 3-12; and also, Figure 3 -11 West Coast Crude Deliveries and Samples of Crudes Available by Rail; Project Description, 3.5 Future Crude Oil Feedstock, p.3-24]

Under the Project, therefore, it is possible that by a careful balancing of qualities, "very sweet to very sour" and "very light to very heavy," Valero would be able to process nearly all or any one of the available North American-sourced crudes that they consider "price-advantaged" and that are "available" and accessible." The DEIR claims, without evidence, that the only constraint on processing much heavier or very light oils is that in blending them, the general "average weight and sulfur content of Valero's crude feedstocks over any given amount of time must remain relatively constant." [Project Description, 3.5 Future Crude Oil Feedstock, p. 3-22].

Other variables mentioned by the DEIR's Project Description that would influence Valero's choice of crudes are implicit in Project Objectives; but those listed are "externalities" to a CEQA review: accessibility, availability, price, market conditions, end products desired. Yet if weight and sulfur content are considered the only, and very manageable, key chemical *processing* factors determining choices of domestic and Canadian sourced crudes for their optimal "blend" range, then the other "external" variables become the most important to Valero in making their decisions about crude imports. **Valero made it clear in their official presentations that** even crudes with extreme API Specific Gravity and TAN can be considered "manageable" if blended with

[40] Goodman Group Report, DEIR, CD ONLY. Appendix B. Scoping Report

other mitigating ingredients, so that crudes at the outer ranges of characteristics "sweet to sour" can be made to fit into their crude slate "blend." Thus, it can be inferred that, within the Project framework, *since crude deliveries could be made by one or another transport option in the future* (rail, marine vessel, pipeline), the "quality" factors most important to Valero in choosing crudes to be imported, must be accessibility and price per barrel.

Why doesn't the DEIR make this clear? The DEIR points out that the Refinery operations are "so complex" that a mathematical model is used "to determine the most profitable operating strategy." The general description goes on to list variable "inputs" to the model, including existing "configuration and constraints of the refinery, crudes available, market demands, product prices and product specifications." [3.Project Description, 3.3.1.3 Refinery Optimization, p. 3-10]

Reflected in the VCBR DEIR, the VIP's key Objectives were then, and now, remain:

> " . . . to provide ability to process lower grades of raw material" and "provide greater flexibility in refinery operations" [VIP DEIR Oct. 2002, Project Objectives and Components, p.3-3].
>
> The VIP DEIR also states,
>
> "The VIP changes would allow the refinery to purchase and process additional volumes of lower-grade raw materials (crude oils and gas oils). In general terms, the refinery would be able to increase this percentage to about 60%, raising the average sulfur content of the imported raw materials from current levels of about 1 – 1.5% up to future levels of about 2 – 2.5%. With the increase in maximum crude rate, there would also be an opportunity for the refinery to reduce processing of gas oil when economics favor the substitution of crude oil." [VIP DEIR, 3.4.2 Feed Stock Discussion, p 3-20]

The ramifying effects of the level of flexibility provided by VIP that the currently proposed VCBR Project reflects are not discussed in the DEIR with regard to public safety and public health risks and impacts that would be foreseeable and occur over an indefinite time into the future.

Thus, on face, these several statements drawn from the VIP DEIR reflect the importance Valero continues to place on maximizing flexibility for *processing* a variety of lower quality raw materials including more varieties of both heavy sour crudes, as well as even lighter, sweeter crudes than Alaska North Slope crude. (VIP ostensibly retooled the Refinery to accommodate a greater variety of heavy sulfur-laden crudes, since the Refinery had originally been built and configured to process then readily available Alaskan crude).

d.) At the July 10th 2014 Planning Commission hearing, expert counsel for the City of Benicia, M. Bradley Hogin suggestively described why the actual sources of crude that would be imported by rail and their specific characteristics would constitute elements of

Valero's proprietary crude slate "blend" and would therefore be protected under federal trade secret law. He proceeded to liken the delicate balance of a crude slate's ingredients to that of a proprietary "Gary Denko" recipe, which he mentioned might include such delicacies as "sliced mushrooms and cream sauce." His meteoric leap into metaphor did not yield an apt equivalent, but a startling affront to public sensibilities: Valero's daily 165,000 barrel-a-day permitted annual average throughput "sweet-sour blend" is neither edible, enjoyable, nor good for public health. Instead, it would be "inhaled" – in nasty, chronic, invisible low-level synergistic daily doses of toxic gases – by local residents and those "downwind." Thus, Mr. Hogin's poetic effort to make crude ingredients seem benign, if not sublime, didn't meet the test of reality, although his comparison could support the fantasy of a Denko dining experience. In any case, he made his point that the public has no *current* right to know, or way to know, under federal law what particularly blended poisons a changing crude slate recipe would hold for our community and Bay region. We found Mr. Hogin's comments inaccurate, demeaning and without concern for public health.

All things considered, Mr. Hogin gave a more vivid picture than the DEIR of "confidential" business information's dampening effects on the public's right to know. He also cited the limiting effect of federal Preemption on regional and state jurisdictions' authority to condition rail activity for any reason. Speaking to the constraints Preemption imposed on the DEIR's accounting of Project effects from transporting crude by rail, he seemed to double down on what he considered the irrelevance of CEQA, such that the omissions of fact in the DEIR's discourses on impacts are made to seem artifacts of legal constraints, thus making it hard to discern from the DEIR's descriptions whether there was much danger at all owing to the delivery by rail of Bakken oil or tar sands to the Refinery, or indeed, owing to the processing of such extreme crudes as Bakken or tar sands that over time could constitute the primary ingredients of Valero's throughput.

The DEIR quotes Valero management's more recent statement, made in 2013, that they intend to import "North American crudes [that] will be 'Alaska North Slope (ANS) look-alikes or sweeter." [3.5 - Future Crude Oil Feedstock, p.3-22 -24]. Yet the DEIR qualifies that assertion, continuing:

> "Valero selects crudes based on a range of variables that can change over time. Thus, the project could foreseeably result in Valero's purchase of any of the crudes listed [in Table 3-1] as well as others that might become available." [p.3-24].

The DEIR hedges on the subject of which crudes Valero would likely import, pointing to 38 different North American crudes that could be candidates. Yet, Valero's spoken intent to go after ANS "look-alikes," effectively suggests that Bakken oil, which is currently readily available, rail-accessible and discounted, is the "sure bet" for import under the Project, and the DEIR should say so.

The DEIR avoids use of the term "lower quality" to define the possible crudes intended for import. However, from the various limited DEIR descriptions, a reader can interpret

that Bakken oil, while "sweeter" than Alaskan crude, must have less desirable chemical qualities if indeed it is considered a "lower quality raw material."

Valero's intention now of seeking available domestic crudes that are "ANS look-alikes or sweeter" suggests that the options in constant play that *primarily* drive decisions are price advantage, availability and accessibility. The DEIR does not otherwise explain the Applicant's intent to go after "even sweeter" Bakken.

What other characteristics define a crude's *chemical* qualities? What makes Bakken oil a "lower grade raw material?" What are typical effects of processing *extra light tight oil*? If it is so desirably "sweet" like an ANS crude, why is Bakken shown in Figure 3-11West Coast Crude Deliveries and Sample of Crudes Available By Rail [p.3-24] to be outside Valero's optimal feedstock "blend box?" Is there such a thing as a crude "too sweet" to handle without other crudes added? If so, why? What is the breaking point expressed as a percentage of a crude feedstock at which the Refinery can safely process Bakken oil or "ANS look-alikes" such that VOC emissions would not exceed *current baselines* for those emissions (as opposed to previous permitted limits)?

The over-generalized comparison of *similarities* between ANS crude and "Alaska look-alikes" obscures the particular *differences* among domestically sourced "sweeter crudes" (Bakken or Eagle Ford, etc.) and conventional Alaska crude.

The DEIR repeats its claim, without evidence, that because there would be no changes to their crude slate blend's "range" (scale from light to heavy, sweet to sour) there would be no increases in emissions resulting from processing either ANS look-alikes or very heavy tar sands crudes or a balance of both. In any case, we are reminded again that emissions wouldn't be allowed to exceed threshold levels set by VIP permitting in 2003, albeit this "promise" gives ample room for acute accidental releases not monitored by the Bay Area Air District that exceed permitted thresholds. The DEIR does not explain this, or that the District relies on emissions "averaging" (no emission spikes accounted for nor those days when maximum permitted throughput capacity– 185,000 barrels per day – is reached.)

There's no doubt that Valero aims to import Bakken, despite the DEIR's deflections. The DEIR preparers' attempt to withhold as "trade secret" the oil's specific name of the intended "likely ANS-like sweet domestic oil to be imported" is an insult to the public, which is alarmed by the recent history of derailments with fiery explosions of Bakken that have drawn public concern and outcry from every corner of the land among the millions of people living near rail lines who are now daily exposed to the extraordinary hazard that those Bakken loaded 100 car unit trains represent.

The DEIR does not address specific effects of processing Bakken or consider what other sources describe as its comparability to gasoline.[41] Some sources in North Dakota say Bakken could be characterized as resembling a *natural-occurring* gasoline. Does the method of extraction of Bakken – hydraulic fracturing – potentially affect Bakken's

[41] "Oil by Rail Safety in California: Preliminary Findings and Recommendations," Report of the State of California Interagency Rail Safety Working Group, June 10, 2014.

quality at the time of its extraction? During transport over long hauls by rail? Chemicals associated to those "fracking" methods have been discussed as impacting crude quality. The DEIR must at least identify these potentialities, even if "fracking" chemicals are deemed proprietary by the industry.

In addition there is much discussion at federal DOT levels of the problem of Bakken's highly volatile "light end" gases including benzene, propane, butane, methane, and highly corrosive hydrogen sulfide (H_2S), a dangerous neurotoxin and life-threatening gas, having a characteristic "rotten egg smell" that in very acute direct exposure conditions – exposure doses registered in very low parts per billion – can cause unconsciousness in a matter of minutes. Chronic low-level exposures "at a distance" over time to H_2S have been studied by CAL-EPA's Office of Environmental Health Hazard Assessment [OEHHA]. Those studies show serious public health impacts and impairments suffered from chronic H_2S exposures.[42]

What are the unique qualities that have earned Bakken the qualifiers, "unconventional," "extreme" and "imminent hazard?"[43] What are effects of Bakken's extraction methods?[44] When and why are Bakken's "light end" gases a problem?[45] Bakken's changing conditions under pressure during rail transport?[46] What are the potential effects of Bakken's particular characteristics during processing?[47] What are the dangers left behind at Bakken's sources?[48]

A debate in the industry, among crude suppliers and rail companies, is ongoing about recommendations to de-gasify Bakken at the wellhead – e.g., strip out natural gas liquids – before the oil is loaded into tanker cars. Degasification is discussed as a means to prevent the kinds of catastrophic explosions that have occurred since July 6, 2013, at Lac Mégantic, Quebec, where a Bakken-loaded train's fireball during a derailment in the town's center instantly incinerated 47 people, destroyed more than 30 buildings and

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[42] OEHHA, Chronic Toxicity Summary, Hydrogen Sulfide,CAS registry number: 7783-06-4

[43] http://www.dot.gov/briefing-room/emergency-order U.S. Dept. of Transportation: Emergency Order Docket No. DOT-OST-2014-0067, updated May 7 2014.

[44] National Geographic, "North Dakota's Salty Fracked Wells Drink More Water to Keep Oil Flowing" November,11, 2013, http://news.nationalgeographic.com/news/energy/2013/11/131111-north-dakota-wells-maintenance-water/

[45] Wall St. Journal, "North Dakota Fracking; Behind the Oil-Train Explosions: Volatile Gases Aren't Removed from Bakken Shale Crude; 'The Regulations are Silent." July 2, 2014. http://online.wsj.com/articles/north-dakota-fracking-behind-the-oil-train-explosions-1404761720

[46] Dangerous Goods Transport Consulting Inc; submission on behalf of American Fuel and Chemical Manufacturers to USS Dept. of Transportation, May 14, 2014: A survey of Bakken Crude Oil Characteristics Assembled for the US Dept. of Transportation."

[47] Hydrocarbon Processing: Processing shale oils in FCC: Challenges and Opportunities, Sept 1, 2013; http://www.hydrocarbonprocessing.com/Article/3250397/Processing-shale-oils-in-FCC-Challenges-and-opportunities.html

[48] Bloomberg Businessweek ,"Radioactive Waste Booms With Oil as U.S. States Weigh Rules," April 16, 2014
http://www.businessweek.com/news/2014-04-15/radioactive-waste-booms-with-oil-as-new-rules-mulled
Second radioactive oil wastesite found in North Dakota. AlJazeera. April 25, 2014
http://america.aljazeera.com/articles/2014/4/25/radioactive-wastedakota.html

spilled 1.6 million gallons of oil into the surrounding soils and Chaudiére River. Since Lac Mégantic, five more catastrophic derailments involving Bakken explosions in less than one year alone earned Bakken-loaded crude unit trains the widely used moniker "Bakken bomb trains."[49]

The Lac Mégantic catastrophic derailment was partly owing to human error; but other key factors were the gases vaporizing under pressure that self-ignited and exploded inside DOT-111 tank cars during derailment. The CPC-1232 tank cars that the Applicant has promised voluntarily to purchase or lease for the Project have not proven safer for prevention of similar catastrophic explosions involving Bakken. The Lynchburg VA crude train derailment and explosion, April 30, 2014, involved Bakken-loaded 1232s.[50] [see this Response, Section 8]

Degasification is not yet a requirement of North Dakota's Bakken producers. Texas requires producers of oil from shale in the Permian Basin and elsewhere to degasify oil before shipment by pipeline and rail. The DEIR must account for conditions at the well-head, whether or not degasification has occurred, for rail shipments of Bakken destined for Benicia and the Valero Refinery.

Potential and cumulative indirect and direct impacts that could adversely affect our local community and environs and those "uprail" and "downwind" resulting from the transport, storage and processing of Bakken and tar sands cannot be fairly estimated or accurately evaluated without specific information, which cannot be found in the Draft Report.

e.) The varied chemical makeups of particular unconventional crudes matter: constituents may include increased concentrations of volatile organic compounds [VOCs] – gases including benzene, propane, methane, butane and hydrogen sulfide – and/or heavy metals including carcinogenic cadmium, arsenic, nickel and lead, which US-EPA identifies as a neurotoxin with no safe limit of exposure and California law strictly regulates.

Such analysis of likely effects of the qualities of Bakken and/or tar sands crudes on refining process impacts was submitted to the City of Benicia in the Phyllis Fox Report. The Fox Report[51] addressed likely emissions increases and other risks that would result from future changes to the Refinery's crude slate blend.

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[49] Wall St. Journal, "North Dakota Fracking; Behind the Oil-Train Explosions: Volatile Gases Aren't Removed from Bakken Shale Crude; 'The Regulations are Silent." July 2, 2014. http://online.wsj.com/articles/north-dakota-fracking-behind-the-oil-train-explosions-1404761720 Desmogblog.com Oil Industry Study Claiming Bakken Crude Safe Contains a Whopper of a Disclaimer. Aug 14, 2014

[50] Sightline Daily – "New "Safer" Tank Cars Were Involved in Lynchburg, VA, Oil Train Fire." May 1, 2014 http://daily.sightline.org/2014/05/01/new-safer-tank-cars-were-involved-in-the-lynchburg-oil-train-fire/ Excellent aerial footage, taken by a drone, surveys the entire train and trackage involved in the derailment.

[51] See Phyllis Fox Report on the IS/MND; also Ms. Fox's Comment Letter on the Valero CBR Project DEIR Appendix B. CD ONLY "Scoping Report;" scroll down until it is located. The Report was not submitted as part of Scoping, so it should be relocated to its own Appendix in a revised DEIR.

f.) Tar sands crudes present a host of different transport and processing issues, raising prospects for increased air emissions including fine particulate matter PM2.5, more accidents due to higher levels of corrosive sulfur, and more petroleum coke production. PM2.5 pollution would increase from transport and off-loading operations at the Valero petcoke marine terminal at the Port of Benicia.[52]

The Project Description does not identify any specific requirements for processing "heavier crudes" other than saying it takes "*more* processing." [our italics for emphasis].

> "As a general rule heavier crudes require more processing than light crudes, and sour crudes require more processing than sweet crudes." [3.Project Description; 3.3.1.1 Types of Crude Oil, p.3-8]

What constitutes "more processing?" Why does heavier crude require "more processing?" Is more hydrogen required for processing tar sands? If so, why?

In responding to public concerns about whether the Project would import and process tar sands, Valero managers have responded in recent presentations by comparing Canadian "oil sands" crudes to very heavy "San Joaquin" crude, which is delivered to the Refinery via pipeline from the San Joaquin Valley. The over-generalization of their similarities relative to weight and sulfur content, without any further amplification of those crudes' *other* chemical differences, has an equalizing effect, such that it might be assumed from Valero's comparisons or DEIR generalized discussions, that it would make little actual difference at the Refinery whether they were processing San Joaquin or tar sands crudes. Do tar sands crudes require more processing than San Joaquin crude, and if so, for what reason?

The equalizing effect via general comparison doesn't do justice to the range of particular concerns expressed in dissenting evaluations found elsewhere and submitted to the City of Benicia as official comments on the IS/MND and current DEIR by the Natural Resource Defense Council and Dr. Phyllis Fox[53] and other comment letters submitted on the IS/MND and for Scoping.

Thus the DEIR limits by generalized, inaccurate comparisons any real discussion of specific chemical qualities of crudes intended for import that could be a factor in increasing processing emissions and/or Refinery releases and accidents. Discussion level is reduced to the most elementary scales and ranges of weight and sulfur content: "light to heavy" and "sweet to sour." [Project Description, 3.3. The Existing Refinery – various sections; also Appendices C.1 and C.2].

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[52] NRDC http://www.nrdc.org/energy/tar-sands-health-effects.asp ; also, NRDC Comment Letter, dated July 1, 2013, on the IS/MND, citing Phyllis Fox Report. , PhD. PE Consulting Engineer: Comment on Initial Study/Mitigated Negative Declaration for Valero Crude By Rail Project, July 1, 2013 {DEIR Scoping Report page 558]; also, "Tar Sands: Dirty Oil and the Future of a Continent," Andrew Nikiforuk, 2010; David Suzuki Foundation. A complete resource on tar sands from Canada's preeminent investigative journalist living in Calgary.

[53] Ibid.

g.) No other particular chemical qualities are identified that would be pertinent to evaluations of risks pertaining to a changed crude slate, whose percentages of "North American-sourced crudes" are very *likely to increase incrementally over time* if domestic and Canadian crudes remain price-advantaged. Such potential and foreseeable "crude creep" – proportional changes to the crude slate from import and use of greater amounts of Bakken and/or tar sands and other similar unconventional domestic and Canadian-sourced crudes – is not discussed in the DEIR, yet the issue is hugely relevant to impact analyses. The Phyllis Fox Report and various comment letters on both the IS/MND and Scoping discussed this problem.[54]

On the contrary, the DEIR insists, without substantiation, that there will be no change in the crude slate by claiming that if the relative weight and sulfur contents of the crudes processed are blended to be within the Refinery's optimum range for those two properties, then emissions would not change. However, the DEIR adds the caveat that emissions levels would be kept below their permitted levels established under VIP in 2003. This does not mean that actual emission levels would not exceed current emissions levels which could be lower than the 2003 originally permitted levels.

h.) About "permitted" baselines and "current" baselines for reporting emissions levels: The DEIR fails to make clear the discrepancies possible between emissions reporting under formerly established "permitted levels" and emissions reporting under current baseline conditions. This complicates a reader's ability to judge statements about whether emissions would or would not increase as a result of processing tar sands or Bakken. The DEIR remains silent on tar sands generally. Appendix C.1 [Areas of Controversy – Potential Air Quality Impacts from Increased Use of Heavy Canadian Crudes], prepared by ESA, attempts to ward off public concern about effects of processing tar sands. However, Appendix C.1 adds nothing to what was said in the DEIR's Project Description:

> "The City has considered this issue carefully, and reached the following conclusions:
>
> (1) There is no reason to believe that, if the Project is approved, Valero would be more likely to purchase heavy Canadian crudes than any number of other North American crudes that are lighter and/or sweeter;
>
> (2) Even if Valero were to purchase large amounts of heavy sour Canadian crudes as a result of the Project, this would not cause an increase in refinery emissions because Valero must blend crude feedstocks to a narrow range of weight and sulfur content before processing them; and
>
> (3) Even if refinery emissions were to increase based on Valero's purchase of heavy sour Canadian crudes, any such emissions increases would properly be considered part of the baseline because the baseline includes of the full scope of operations allowed under existing permits that were issued based upon prior CEQA review." [Appendix C.1 C.1-1]

[54] NRDC letter; Phyllis Fox Report; Bardet and Beutel comment letters.

The important caveat in (3) is repeated:

> "Finally, even if one assumed that Valero will purchase 70,000 barrels per day of heavy sour Canadian crude, and 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." [Appendix C. C.1-1]

Appendix C.2 [Areas of Controversy –Potential Air Quality Impacts From Increased Use of Light Sweet Crudes] basically repeats, and adds nothing of substance to, what has already been said on the subject of light sweet ANS-look alikes, e.g. Bakken. The DEIR assumes there would be no changes in the range of weight and sulfur for the crude slate blend, so that nothing would change with regard to emissions. This is again an unsubstantiated claim which leans heavily on the use of the outdated (previous) VIP permitting limit from 2003. What proof is there that there would be no emissions increases above the permitted VIP levels?

The DEIR gives the reader no information about current daily throughput volume, which is a major factor in estimating emissions levels. At what daily average volume throughput is the Refinery currently processing? If that figure is <u>below</u> the annual average daily throughput permitted of 165,000 barrels per day, by what percentage below? In the last year or two, has throughput volume processed ever reached the <u>maximum</u> permitted amount allowable on any given day of 185,000 barrels per day? If so, for how many days in 2012 and 2013?

i.) The <u>baseline permitting level</u> referred to in Appendix C-1 is the emissions level allowed by the <u>Valero Improvement Project permit issued in 2003</u> by the Bay Area Air Quality Management District [Air District]. According to the current regulatory regime, this means that, when processing either or both tar sands or Bakken, if daily production levels at some time in the near future (after implementation of the Project) did not meet the permitted daily annual averaged maximum of 165,000 barrels per day, even if actual emissions were to increase resulting from processing those crudes, those emissions may not rise to the level permitted in 2003 under VIP, (e.g., at the permitted average maximum daily production level).

The DEIR offers minimal explanation to help the public understand that under <u>existing regulatory rules</u> for emissions reporting and permitting, it's possible that actual emissions resulting from processing tar sands (and/or Bakken) may in fact i*ncrease* relative to a *current* <u>baseline of existing emissions,</u> while at the same time registering *below* the 2003 permitted level, (e.g. emissions produced from a crude slate processed prior to Project-related processing of tar sands or Bakken). As a result, regarding that circumstance, it is possible for the Refinery to report estimates that there would be "no increases in emissions" from a changed crude slate, if actual emissions increased from a current baseline were compared to an old, outdated baseline from more than a decade ago. <u>A revised DEIR should provide current baseline data, e.g., emissions reported in 2013</u>. In any case, whether processing light sweet or heavy sour crudes, the aim should be <u>emissions reductions measured from current baselines</u>. Many Bay Area residents are now

petitioning the Air District to require emissions reporting based on *current* emissions data, thus not allowing actual increases based on outdated permitted baselines.

The DEIR and the Applicant appear to make every effort to disguise, by not disclosing, the true nature of not only the transport dangers of delivering Bakken or tar sands by rail, but also, by projecting a *created image* of the Project as benign and safe, against the evidence-based reality of what they are bearing to the community like the Trojan Horse. Tar sands crude oil when spilled in waterways, lakes, along shorelines, wetlands and/or marshes is impossible to clean up using ecological methods because bitumen sinks and sticks like tar to everything it lands on, so cannot be removed from rivers, lakes, shorelines or wetlands.

j.) When and how might Canadian tar sands become accessible to the Valero's Benicia Refinery? The issue is highly pertinent to evaluating potential future Project effects including cumulative effects and estimates of emissions from ship transport of crude oil.

At a Valero Community Advisory Panel tour of the Project site, July 29, 2014, Refinery manager, John Hill, was asked about the Project's effects on future port utilization, which the questioner posed would appear to be diminished by the Rail Project if approved, given that, according to the DEIR, the Project would eliminate approximately 81% of ship deliveries of foreign-sourced crude and replace those marine deliveries by daily rail deliveries of *up to* 70,000 barrels per day of North American-sourced crude. Mr. Hill responded by saying that, with the Project, there would continue to be deliveries of crude by ship (understood to be "foreign" although he did not specify sources) as well as continued export of finished product. He wrapped up his response by saying that Valero intended to "keep options open" regarding future uses of the port. [55]
The DEIR is silent on the matter of future port utilization and "options." Why? So we must ask directly: What future "options" could co-exist with Project operations for marine deliveries of unconventional North American-sourced crude at Valero's port, as suggestively hinted at by Mr. Hill's most recent wide-open comment about future port "options?"

As previously discussed, the DEIR's Project Description alludes to such factors influencing Valero's decisions regarding crude choices; however the DEIR does not offer explanation as to their meaning with regard to the long-range viability of the Project and the various "options" the Project implicitly entertains.

Constituting over a decade's worth of upgrades, the Valero VIP Project prepared the Refinery for processing a greater variety of heavy sour crudes, foreign and domestically

[55] John Hill, Valero Refinery manager, speaking to Valero Community Advisory Panel members on an official tour of the Project site, July 29, 2014, responded to a question posed regarding future uses of the Valero port given the proposed reduction of crude deliveries by marine vessel expected if the Project were to be implemented. Mr. Hill asserted that they want to "keep options open." This was understood to mean continued utilization of the Port for export of finished products as well as for deliveries of crude oil. Mr. Hill did not specify use of the port for future marine delivery of North American-sourced crude, or use of the port as a possible export terminal that could be potentially connected to Project crude-by-rail import operations.

sourced. So it's highly likely that at some point Valero would choose to import heavily discounted Canadian tar sands *as long as the price advantage held up*. As reported everywhere in oil industry and media sources, the oil industry "majors" are direct investors in tar sands mining operations, and together with the Canadian government, they are keen to ensure that a pipeline is constructed to connect to planned British Columbia oil port terminals where tar sands could be transported down the West Coast to California refiners.[56] Marine terminal operations, such as planned by WesPac LLC for Pittsburg and by Targa Resources for the Port of Stockton could receive those marine deliveries then supply refineries along the Carquinez Strait via barge or pipeline, including to Valero's port in Benicia. Or, tankers loaded with tar sands from Northwest ports could directly off-load at Valero's port.

The DEIR does not, but should, explore changing scenarios for transport and delivery of domestic and Canadian sourced crude to the Refinery in conjunction with Project rail operations and identify how such feasible and foreseeable changes would affect DEIR claims for Project GHG reductions and marine hazard reductions, considering that rail deliveries of North American-sourced crude could be variably combined with marine vessel deliveries of similarly sourced crudes to achieve daily supplies of fluctuating volumes of crude oil, e.g., at least 70,000 barrels per day (or more). [ES-1, Project Objective #2].

k.) What other operations or conditions might the Project foreseeably lead to within the timeframe of the Project's "life?" Are options for *exporting* raw materials including domestic crude being envisioned? The City of Benicia and the community need to know *now*.

l.) Given that the Project appears to be designed to provide maximum flexibility and "options" for delivery of North American-sourced crudes, the DEIR's analysis of GHG reductions assumes 81% of ship deliveries would be eliminated, to be replaced by equivalent rail deliveries. Even if those assumptions and evaluations could be trusted at face value, they would not hold up if marine vessel deliveries were to be increased at any time in the near-term or in the "indefinite future" to allow deliveries of tar sands crudes for processing, e.g. if and when, as expected, such marine deliveries down the West Coast or from inland oil terminals like the Port of Stockton or Pittsburg could be permitted.

This is not a case of speculation, but planning for use of Valero's port, if and when there is a feasible "link" made to one or more inland oil terminals or ports that could supply tar sands or any other North American sourced crude.

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[56] Save Our Skeena Salmon "BC Oil Terminal Plans –Was it Prince Rupert all along?" http://saveourskeenasalmon.org/tar-sands-tanker-debate/prince-rupert-oil-terminal-plans/
The Oregonian, "Port of Vancouver approves big crude oil terminal amid safety concerns," July 25, 2013
http://www.oregonlive.com/environment/index.ssf/2013/07/port_of_vancouver_approves_big.html

Would more hydrogen be required for processing tar sands in excess of what the existing hydrogen unit can provide, if tar sands were to be imported in the near future, that is, when dilbits could become more widely available and distributable to West Coast refiners? I more hydrogen is called for, would Valero have to renew a permit under a separate CEQA process, considering the likelihood that importation of tar sands could be reason for the demand?

What's clear: Valero continues to aim to access price-advantaged crudes, whether these represent opposite ends of the "sour to sweet" range and within the framework of the proposed CBR Project, whether these "advantaged" crudes are delivered by rail, marine vessel or pipeline. This chimes with the VIP DEIR's account of Valero's desire to maintain Refinery "flexibility" which translates to Valero profit.

Members of the public have had little, if any, chance to hear directly from Union Pacific representatives about UP's role and the service they would provide to Valero managing VCBR Project rail logistics. Valero is essentially a client of UP; the DEIR assumes the reader would understand this. The DEIR should describe the relationship clearly.

With regard to UP's authority, the service UP provides under federal law puts the client at some disadvantage. For instance, major long-time clients of railroad companies such as UPS (think "Christmas!"] and Midwestern grain farmers [think harvest!] continue to expect "on time" scheduling of their freight pickups and deliveries but are now finding that they are in direct and increasing competition for freight rail service with oil suppliers and refiners contracting for crude-by-rail transport. [57]

With the enormous increase in the number of crude trains expected by 2016 to be running the rails in California alone, a revised DEIR should discuss what negotiated terms have been agreed to by Valero and UP. Would Valero expect its "requests" to be granted? Would schedules for crude trains be considered a priority service by UP? Is compliance with their scheduling requests a primary performance measure for Valero? Project objectives presume two rail deliveries of up to a total of 70,000 barrels per day, 365 days a year.

End of BSHC Section 4: Response to Sections 3.1 - .3.7 of the DEIR (PROJECT DESCRIPTION)

[57] High Plains/Midwest AG Journal, "Slow go: Farmers, shippers concerned about impact of rail delays. April 21, 2014 http://www.hpj.com/archives/2014/apr14/apr21/0415Agripulsesr.cfm - .VBOPvChYyfQ

SECTION 5: BSHC RESPONSE TO SECTIONS 4.1 AND 5.4.3.1 (AIR QUALITY)

Concerns regarding Air Quality have been previously discussed in this Response Section 2. Comments below are in addition to those already previously presented.

The BAAQMD's regional air monitoring stations in Vallejo and Concord do not account for specific local air quality conditions in real time, and in any case, depend on averaged sampling data taken over as much as 24 hour periods. Real time data is the only way to account for acute spikes in emissions that occur during refinery "incidents," "releases," "upsets" and "accidents." A full discussion of the lack of, and need of, local, community-based, real-time air monitoring with public access to data via an independently managed website, as mandated by the Valero/Good Neighbor Steering Committee Settlement Agreement, (2008 and 2010 Amended), must be part of a revised DEIR and must be a required mitigation implemented to account for increased local emissions projected.

Reducing toxic emissions and enhancing regional air quality is a goal of the Benicia General Plan. GHG reductions are called for by the City of Benicia's Climate Action Plan. There is no reason to accept increases in diesel emissions in Benicia owing to the VCBR Project trains that would be moving back and forth during switching and idling movements, besides arrivals and departures. Diesel emissions are toxic to human health and aggravate existing respiratory conditions, heart and lung function. Diesel exhaust is also a great source of GHG. Already the Refinery is a huge contributor to GHG from processing activities, yet the facility's contribution is not counted as part of the City's total GHG emissions. If it were, our City's true carbon footprint would be seen, and it would be understood that the Refinery would overwhelm our City's ability to reduce GHG.

The general assumption made throughout the DEIR's analysis of emissions impacts that if an emissions limit is set by regulations, only if that emission level is exceeded could the emissions released "count" as an increase. Thus, levels set by different management districts apply at the time a project is permitted by that particular air district. The fact that one district has higher permitted levels than another doesn't change the fact that emissions have increased owing to the *addition of more trains* running daily on UP tracks traveling back and forth between those several air basins' boundaries between Placer County, Sacramento Area, Yolo-Solano to Benicia.

The limiting of analysis to several Air District's Air Basin boundaries (Bay Area, Sacramento and Yolo-Solano is arbitrarily limiting of the full scope and extent of total air emissions impacts along Project train routes out to the California border and beyond to the crude source. Return trips must be accounted for.

Impact 4.1-1b: "Operation of the Project could contribute to an existing or projected air quality violation."

- Impacts to local air quality in Benicia are not reduced or off-set by diesel emission exhaust claimed to be reduced elsewhere, on the Bay and out beyond the Golden Gate Bridge for 11(?) nautical miles. Round trips must be considered for accounting emissions from both trains and ships. Local cumulative emissions would in fact increase from rail (diesel) and Refinery

processing. For local emissions impact reporting, the daily number of locomotives hauling both crude-loaded trains and "empty" trains returning must be accounted for.

• The size of tankers and the *current* volumes delivered by each type must be provided.

• Baseline years should be current, 2010 – 2013

• Since at any time within the framework of the Project the number of marine vessels (small and large tankers or barges) could increase, the DEIR must account for variable, foreseeable changes in means of transport, which would also change impact analysis for criteria pollutants and GHG that could increase above DEIR's claimed Project levels.

• As previously discussed, the DEIR's claim that "the Project would not result in increases in emissions from crude oil processing" is unsubstantiated and indefensible without factual characterizing of the unique qualities of the specific crudes that would be imported and processed.

<u>Impact 4.1-3</u>: "The Project could expose sensitive receptors to substantial pollutant concentrations."

• The limited health risk analysis only identified residents living on the nearest street to the rail offloading racks, thus, as the crow flies, on Lansing Circle. However, there is no reason that the DEIR did not consider occupants and employees in the Industrial Park, who likely spend as much time "at work" as the residents of Lansing Circle spend at their homes in the evening. Crude trains would add exhaust diesel emissions to the already existing air pollution in the area from other vehicular and rail traffic and the Refinery. A revised DEIR must provide a health risk study for industrial park sensitive receptors.

End of BSHC Section 5: Response to Sections 4.1 and 5.4.3.1 of the DEIR (AIR QUALITY)

SECTION 6: BSHC RESPONSE TO SECTIONS 4.5 AND 5.4.3.5 (GEOLOGY AND SOILS) OF THE DEIR

The recent 6.0 earthquake event that hit a wide swath in and around the City ofNapa and the Valley, also affecting Vallejo, vividly demonstrates what can happen here. A seismic event of equal or greater magnitude on either the Rogers or Green Valley Fault, or the Hayward Fault, could likely displace railbeds in the Suisun Marsh or anywhere in the vicinity of the Refinery, as well as roadways and key infrastructure.[58] It is false for the DEIR to assume that no shifting of soils in a 100 year floodplain where the rail offloading racks are located cannot happen, no matter how well packed the soils are engineered to be.

In the Benicia General Plan's Chapter 4 –Community Health and Safety, Figure 4-1 "Ground Shaking Amplification", [modified from Perkins and Boatwright 1995) shows that the area around the Port of Benicia (Valero docks) as well as the Industrial Park including the eastern portion of of Refinery property, and along of I-680 and UP rail lines, there would be a "high" shaking amplification level. In a second diagram, Figure 4-2 "Areas with Potential Landslide and Liquifaction Hazards," the Green Valley Fault is shown to be running northwest to southeast, cutting a diagonal through the City of Benicia's northern sphere of interest, and crossing into the marsh area just north and east of the Lake Herman Rd-I-680 intersection. The area around the UP main tracks is in a liquefaction zone vulnerable to "lateral spreading" and "settlement hazards."

According to Figure 4-5 "Transmission Lines and Critical Facilities" Valero's asphalt plant pipelines run along from the Port area up to the plant, thus through a liquefaction zone.

A third Figure 4-3 "Flood Hazards" is a diagram showing where the community can expect major flooding during a "100-year" flood. The flood hazard area delineated includes the area of Sulphur Springs Creek and the proposed rail offloading racks on Refinery property.

Yet another Figure 4-4 "Fire Hazards" shows that a good part of hilly Benicia is prone to brush fire, and fire hazard areas also include swaths of vegetated area above and west of Bayshore Rd., and along the marsh.

Adding 100 cars per day of flammable crude oil to the mix of potential hazards in the Industrial Park – whether fire, flood, or earthquake – the effects of a rail accident in a confined area with any or several of the conditions cited would constitute a "spreading risk for greater harm" that could impact the Refinery and most occupants (businesses and employees) in the Park.

Soils engineered for "slope stability" obviously can fail, or roads would not buckle in earthquakes. The DEIR's assumption about the viability of the berm during a big quake 7.0 is highly questionable.

[58] San Jose Mercury News, Sept 12, 2014 "Crude-By-Rail: One federal inspector oversees all Cahttp://www.mercurynews.com/my-town/ci_26525723/crude-by-rail-one-federal-inspector-oversees-alllifornia's railroad bridges, no state oversight." Reprinted from CC Times, Matthias Gafni

The close quarters in the Industrial Park, the close proximity of the proposed rail off-loading racks to Refinery storage tanks, and the presence of Sulphur Springs Creek alongside the rail terminal are ingredients of a recipe for environmental disaster, with many businesses and people affected in the area.

End of BSHC Section 6: Response to Sections 4.5 and 5.4.3.5 of the DEIR (GEOLOGY AND SOILS)

SECTION 7: BSHC RESPONSE TO SECTIONS 4.6 AND 5.4.3.6 (GREENHOUSE GAS EMISSIONS) OF THE DEIR

The DEIR's claims for reductions in greenhouse gases [GHG] owing to rail deliveries substituting for ship deliveries would be altered if there were to be a change, within the Project's lifespan, in the number of marine vessels (small or large tankers or barges) in service of importing North American-sourced crude.

The calculations performed to purportedly demonstrate a GHG reduction advantage gained in substituting daily train deliveries of crude oil for marine vessel deliveries would give the impression that the Project provides a "green" solution by significantly reducing ship-generated diesel emissions. Even given the DEIR's claim, how can the figures used to account for distances traveled by ship be trusted without knowing the specific sources of the crudes accessed by ship and the number of ship deliveries made during "baseline" years. Why wasn't the more current baseline 2010 – 2013 used for calculating GHG?

The Projections for GHG reductions are arbitrarily limited to trade-offs between rail and ship deliveries, without any accounting of indirect emissions from processing the changed crude slate, the extra energy required for processing tar sands, and the GHG produced at the crude source throughout the extraction processes.

The carbon intensity of tar sands and Bakken must be reported in a revised DEIR.

End of BSHC Section 7: Response to Sections 4.6 and 5.4.3.6 of the DEIR (GREENHOUSE GAS EMISSIONS)

SECTION 8: BSHC RESPONSE TO SECTIONS 4.7 AND 5.4.3.7 (HAZARDOUS MATERIALS) OF THE DEIR

HAZARDS AND HAZARDOUS MATERIALS 4.7

The DEIR highlights that Valero accepts the National Transportation Safety Board's recommended, more stringent standards for tank car design features as represented by the CPC-1232 tank car, whose features are intended to improve upon the design of "Legacy DOT-111" tank cars, which DOT has declared unsafe for transport of liquid fossil fuels including Bakken oil.

The DEIR's discussion of hazard Impact 4.7-2 states: "It was assumed that the Refinery would use 1232 Tank Cars for all shipments, based on Valero's commitment to do so." Where is evidence of Valero's commitment in writing? The DEIR asserts Valero's commitment regarding use of 1232 tank cars in the Executive Summary [ES-4 Project Description – Overview] and also in the Project Description under "Tank Cars" [Section 3.4.1.3, p 3-19, 3-20]. Given federal Preemption, how could Valero's "requests" actually determine the composition of trains, e.g., the use of 1232s for daily deliveries of crude oil to the Refinery in Benicia? The only reference to the transfer operation that would take place at Roseville is in two nearly indecipherable sentences in the Project Description [3.4.2.1 Tank Car Transport and Unloading]. The activity is so sparingly and awkwardly described that the reader can hardly visualize the daily event any better than imagine a caterpillar turning to butterfly inside a cocoon.

> "UPRR would transfer the empty 50 tank car train across Park Road and then east on the UPRR mainlines returning to UPRR's Roseville rail-yard. UPRR would assemble up to a 100 empty tank car train and transfer it to accept new loads from the North American crude source." [p. 3-21]

About the Applicant's voluntary commitment reported in the DEIR to lease or buy "safer" CPC-1232 tank cars: [ES-3; also Project Description 3.4.1.3. Tank Cars]
Why does the DEIR support Valero's apparent commitment/claim to control train composition, since DOT confers all authority over train movement, train composition, etc. to private RR companies? The statement of Valero's voluntary commitment is presented as a Project "element" or "component" as a given condition of the Project. This is a certain DEIR flaw contradicting UP Preemption of the Applicant's authority. Beyond Valero's voluntary leasing or purchasing of 1232s, the DEIR must not lead the reader to assume that 1232 cars leased or purchased by Valero would be used from the crude's point of origin (North Dakota, or other domestic shale plays in Texas or Midwest) to UP's Roseville hub. How many 1232s would have to be moving on UP rails every day to ensure that 100 crude-loaded cars per day arrive in Benicia? How many 1232 cars are "on order" for lease or purchase by Valero for the Project? Their voluntary commitment must be considered a

mitigation under CEQA[59] that would "avoid or reduce" to less than significant the risk posed by using an inferior class tank car, the "Legacy DOT-111."

The DEIR does not consider the number of "Benicia-bound" 1232 cars that could be attached to much larger manifest freight trains hauling and making stops enroute to Roseville, where the 50-car unit trains would be assembled for travel to Benicia.

In any case, the alleged greater "safety" of the 1232 car that is assumed and asserted by the DEIR is not accurate. The 1232 car has not been officially tested, neither at "regular" hauling speed or recommended slower 40 mph speed, nor under varied conditions, such as are presented where rails are not running straight along flat terrain. Rather, recent experience has proven at Lynchburg VA, during a serious derailment that occurred on April 30, 2014, that CPC-1232s are not indeed "safer:" 1232 cars containing Bakken oil derailed and exploded, sending a fireball skyward with cars tumbling into the James River, spilling considerable amounts of oil into the drinking water source for the city.

Although the DEIR acknowledges that CPC-1232 tank cars carrying Bakken oil ruptured in in Lynchburg VA, [p. 4.7-8], the citing of that accident does not lead to any further discussion of the relative safety of 1232 tank cars, that they have not been proven safer when carrying flammable liquids, *and further*, that the railroad industry is considering entirely new designs for tank cars that would carry flammable fuels.

In PHSMA's Draft Regulatory Impact Analysis, PHMSA examines (3) tank car designs for the transport of flammable liquids by rail (e.g. crude oils). Of the three tank car options examined for safety, the CPC-1232 is not the safest design option. PHMSA indicates that the tank car option which includes the highest safety enhancements of any of the proposed options and is expected to yield the highest benefit to safety and the environment is known as the 'PHSMA and FRA Designed Tank Car' **("PFDTC").** The three design features of the PFDTC (which are not all available in the CPC-1232s) contribute to its high rating. The enhancements are a 9/16th inch minimum shell thickness, TIH. Top fittings protection system and nozzle capable of sustaining, without failure, a rollover accident at a speed of 9 mph and an ECP brake system.

The DEIR's briefest announcements of federal preemption and federal regulations promulgated by DOT on rail safety, including the *voluntary* "new standards" recommended by the Association of American Railroads [AAR], obscures the fact that the entire topic is a moving target under current federal regulatory uncertainty and rulemaking proposed. Discussions within Section 4.7 appear aimed to convince the reader that the current federal regulatory situation, which is in flux – with (*only*) "voluntary" new standards recommended – would not be a significant reason for concern about local or uprail risks owing to the transport of Bakken oil into California destined for Benicia. Thus a reader could surmise that the DEIR preparers were satisfied that *voluntary* and *interim* safety measures recommended before a new rule is in place offer sufficient protection under the

[59] See SACOG "Comment Letter on Valero Crude by Rail Project Environmental Impact Report" Aug. 2014

current regulatory regime to protect the Benicia community and environment and uprail communities and environs from otherwise foreseeable hazards and risks.

Why wasn't the report from the State of California Interagency Rail Safety Working Group, entitled "Oil by Rail Safety in California: Preliminary Findings and Recommendations," which was officially issued June 10, 2014, not included in the DEIR, in the Appendices? The Report must be made part of a revised DEIR.

The full extent of hazards, as outlined in the Interagency Working Group Report, must be taken into account if decision-makers are to understand the grave and cumulative risks posed by increasing rail delivery of crude oil into California, to which the Valero Project would be a prime contributor. The DEIR's risk identification and analyses are deeply flawed and limited to one geographical distance between Roseville and Benicia.

The statistical analysis and conclusion that the expected crude oil train release incident exceeding 100 gallons in an average estimated to be once in 111 years[60] is flawed as an accurate statistical measurement and as applicable to the requirements of CEQA for the Project.

<u>The analysis fails as follows</u>:

(1) the analysis fails to incorporate the full length of the route which is from the crude oil origination loading site to the rail offloading terminal in Benicia. The inaccurate reporting of the length of the route skews the results.

(2) Factors related to the actual physical characteristics of the route (track class, number of track segments, etc) for the full length of the route are not included.

(3) Other categories of factors related to thea actual physical characteristics of the route and/or trains are not included nor is any reason provided for their absence (e.g., train speeds, number of tank cars per manifest, amount of crude oil per train, etc.)

(4) The analysis assumes that a "derailment" is the only primary accident and contributory causal event. Therefore, it ignores other events that contribute or cause crude oil release but are not caused by a derailment. (e.g. tank car failures, acts of god, man or nature, train-vehicle events, collisions, etc.)

(5) The analysis includes all petroleum crude oil. The analysis should be limited to the specific range of crude oils to be transported to the Refinery via rail. Inclusion of all crudes skews the results an diminishes the specific properties of the actual crude to be transported that have greater environmental and safety risks during transport.

(6) the examination of the period of 2005 – 2009 is not appropriate and skews the results significantly. In fact, shipments of crude oil by rail have only recently spiked in North America and a more accurate time period for the examination should be tied to the time period associated with this spike. PHMSA notes that in 2008, there were less than 10,000 rail carloads of crude oil and by 2013, the rail carloads increased to 400,000.[61]

(7) FRA data is inherently flawed. In addition to the limitations of the database noted (which only includes accidents that exceed a specified monetary damage to railroad

[60] DEIR Appendix F. Railroad Crude Oil Release Rate Analysis for Route between Roseville and Benicia.
[61] Draft Regulatory Impact Analysis [Docket No. PHSMA-2012-0082] [HM-251] July 2014

infrastructure) other limitations are inherent and/or ignored. FRA data does not provide the type of hazardous material released. In fact, PHMSA concludes that it is impossible to use FRA data to identify crude and ethanol derailments.[62]

(8) CPC 1232 railcars have not bveen in use long enough nor have they been full studied for safety factors and record. Reliance on 1232 cars as a safety factor applied to the model is inappropriate.

(9) Data utilized is not provided. The reader cannot independently verify its correct application to the model and cannot verify if the data described as being used is in fact used.

(10) The significance of limiting the analysis to "100 gallons" is not substantiated and is therefore arbitrary. Further, the statement that this is consistent with industry practice is not verified nor is any reasoning provided to support that this is "standard," and if real, whether it is a viable and reasonable measure.

All of the above failures in the statistical analysis coupled with inherent flaws of limiting any Project-related criteria to the flawed assumptions in the Project scope, objectives and descriptions creates false and inaccurate account of foreseeable Project impacts, levels of significance, mitigations, and absence of cumulative examinations in the DEIR. The DEIR ignores and is dismissive of the potentially severe consequences of a wide range of foreseeable events (direct, indirect and cumulative) because of its reliance on flawed statistics and analysis that relies on them.

It follows that the DEIR is missing discussion of any of the current findings that are pertinent to identifying cumulative hazards and public safety risks that would be posed to communities and ecologically sensitive lands and waters through and by which crude trains would travel from their source into California on UP tracks to reach the Refinery. For example, there is no discussion of cumulative impacts associated for the compounding of risks and hazards posed by the foreseeable increase in BNSF crude trains traveling the same UP tracks from the California border heading for the Phillips 66 Santa Maria Refinery, as is planned, or headed for the Kinder Morgan rail yard in Richmond CA.

Rail safety is a concern at all levels of government, considering that approximately 20 million Americans live near railroad tracks that would be used by crude unit trains passing through both urban and rural communities everywhere.[63] Over the immediate "life of the Project," within one or two years, the current claims for the Refinery-plus-Project's air emissions and rail safety risk analyses would likely be further underestimated.

End of BSHC Section 8: Response to Sections 4.7 and 5.4.3.7 of the DEIR (Hazardous Materials)

[62] Ibid. p.22

[63] http://priceofoil.org/rail/ Oil Change International. "Crude-by-Rail Interactive Map and latest report.

SECTION 9: BSHC RESPONSE TO SECTIONS 4.11 AND 5.4.3.11 (TRANSPORTATION AND TRAFFIC) OF THE DEIR

A. Reliance on the 'flawed' Project description in the DEIR results in a flawed traffic and transportation study and analysis.

1. UPPR's Statement of Preemption (see Appendix L of the DEIR) means that all train traffic and related variables are under the control of UPRR and subject to UPRR logistics and operational preferences and/or federal law. Therefore any assumptions made in Sections 4.11 and 5.4.3.11 of the DEIR with reliance on such variables must be dismissed. Assumptions of the number of trains, the number of tank cars and length of any train, and the times of day (schedule) are not supportable. UPRR may bring in any number of trains with any number of tank cars per train at any time of the day. UPRR has "siding" areas (areas to hold tank cars and engines) within the perimeter of the Benicia Industrial Park and elsewhere along the UPRR rails. Siding may be utilized to place UPRR manifests until the Refinery's operational capacity is available. All conclusions of significance and mitigation with reliance on these assumptions must also be dismissed. All cumulative findings and analysis must also be dismissed. The study is fatally flawed by its failure to recognize the impact of the Statement of Preemption.

2. In addition to reliance on assumptions solely under the control of UPRR, the Transportation and Traffic sections rely on other Project Description inaccuracies. The Project is not limited to the transportation of North American crudes. Once the rail and operational equipment is in place, all manner of materials (particularly other crudes) may be then, and in the future, shipped via rail into the Refinery. The only limitation to the type of crude subject to shipment is the nature of the processing equipment, which may be subject to future modification to accommodate any particular feedstock for the full life span of the operations (perpetuity). Even if you could hold UPRR to certain logistic restrictions, the shipment by rail of different and currently unidentified crudes or other materials may drive the train frequency and configurations in an entirely different manner than examined.

3. Failure to utilize an accurate Project description results in a flawed baseline study as false assumptions are used to create the study's criteria and analysis. Therefore, any study based on false and uncontrollable assumptions will result in a flawed baseline study, flawed analysis of impacts (direct, indirect, cumulative), flawed levels of significance assigned and irrelevant mitigations.

B. The baseline is flawed and does not consider the City of Benicia's current plans for the area.

1. CURRENT TRAIN TRAFFIC IS THE TRUE BASELINE. Train traffic currently blocks ingress and egress of Benicia Industrial Park business and tenants for considerable periods (refer to Ed Ruszel's oral presentation of August 14th^{h} to the Planning Commission). During the blockage, the tenants business activities are stalled as employees and customers may not move freely. During the blockage, emergency responders are delayed in the event of medical/fire emergencies when responder's access is prevented. This blockage stems not only from the switching activities over the public roads but also from the rail cars stopped on the tracks in front

of the driveways of businesses. If a train is blocking the driveway of certain business, the use of an alternate street or route is not a possibility. Additionally, the traffic back-up has extended up the 680 off-ramp. Cars merging from 780 onto 680 may be suddenly forced to slow or stop and their ability to merge onto 680 is dangerously impeded. The current train traffic and resulting impacts are significant to the occupants of the Industrial Park. The study concludes that none of the above occurs with any significant frequency. The reality of the daily observers is opposite.

2. THE CURRENT RAIL INFRASTRUCTURE WAS NOT DESIGNED FOR THE CURRENT PURPOSES

The original rail infrastructure was designed for the needs of a sole user, namely the United States Army ("**Army**"). The Army designed the track and controlled its operations solely for its singular purpose. The Army also utilized Wye connectors and loops. This efficient loop trackage allowed trains to enter and exit the premises without backing up: the train could continue forward at all times.

The current rail infrastructure is very different in lay-out as well as number of users. Multiple industrial tenants use the UPRR trackage for multiple purposes and commodities. Currently the Wye and connector trackage that formerly allowed for the enhanced ingress and egress of the trains (the loop structure) has been removed. In lieu is trackage that is linear in nature and does not allow for trains continued forward movement to exit the premises. The trackage into the Refinery is essentially, linear dead-ends. To exit, trains must stop forward movement and reverse back over the same trackage. This linear back and forth movement is less efficient than the prior loop structure. It takes more time to implement the movement of trains back and forth. It may be argued that a) the current infrastructure was not designed for the current purposes and, as such is not particularly suitable for the number of trains, multiple commodities and multiple tenant usage, and b) the loss of the loop structure has degraded the overall infrastructure.

For trains to entering and exiting the Refinery, there is a high dependency on the "switching area" which crosses the public road (Park) and stops traffic during the switching activities. It is this switching and shunting activity that is the major contributor to traffic interference both on the public roads and through to the interstate. The switching activity also contributes to the trains' blockage of many industrial tenants' driveways. Trains sit along the rails for considerable amounts of time either waiting for another train to be cleared at the switching/crossing area and/or waiting for the switching process to be completed for itself. The length of such trains is a contributing factor to each type of blockage at the Park Rd crossing and along the tracks in the near vicinity. The significance of this switching activity is documented in Section 2.5 of Appendix I (Transportation Impact Analysis) by the statement "It is common for a single train delivery to cross Park Road multiple times due to switching or train cutting activity".

The City of Benicia should examine its plans for the Industrial Park carefully. The introduction of the Project, rails and train traffic, is in direct opposition to its vision. The Project creates a significant UPRR train shunting and switching yard for the primary benefit of one tenant (Applicant) in the middle of a public thoroughfare (Park Rd) and to the detriment of all others (public and industrial tenants). The current rail infrastructure was never built, modified, or

adequately examined for efficiencies and adequacies for the current Industrial Park layout and requirements nor for future layout and requirements. In fact, it has been modified in a hobbled, short term fashion over time without the benefit of any planning of configurations to meet the Industrial Park's business needs or the City's plans. All infrastructure has limitations of capacity. The existing rail structure within the Industrial Park area is no exception. The traffic and transportation analysis does not consider the City's general plans in its projections.

3. THE BASELINE AND BASELINE STUDY IS FLAWED FOR OTHER REASONS.

The LOS method of examination may be appropriate to measure vehicular traffic flow but may not be an effective measure of blockages of tenants' driveways, pedestrian and bicycle activity. LOS is formulated to measure a vehicle driver's perspective in relation to the vehicle's impediment to movement while it is on the roadway. Tenants unable to leave a business are not "on the roadway" and the dynamics are different. Pedestrians are also not equally impacted. Delays from walking are not akin to driving.

Section 1.7 of Appendix I (Transportation Impact Analysis) says "Generally, people that drive through industrial areas served by at-grade crossings have a higher tolerance of delay associated with intermittent at-grade rail activity compared to delay at intersections that are not in the vicinity of an at-grade railroad crossing. Therefore, LOS delay thresholds that apply to intersections are not readily applicable to at-grade railroad crossings". This statement is dismissive, overreaching, and conclusory. First, it assumes that the current and projected delays for the at-road crossings are intermittent and therefore tolerable. Intermittent is not defined and no evidence is presented to delineate at what level people move from a perception of mild annoyance to a perception of intolerability. If intolerable, people may choose to a) not use the services and businesses at the Industrial Park and/or b) move their businesses from the Industrial Park to an alternate location. Second, while it may be true that LOS is not a proper measure for at-crossing delays, the relationship between the choice of measurement (LOS) and a person's tolerance is spurious.

The accuracy of the VISSIM software program is highly dependent upon the variables input into the program for analysis. If inaccurate, false, and/or spurious factors are input or relevant factors are not input, the results are of no value and will generate a false report. Dependency upon correct and applicable input data is high and in this study, the input data was based on false assumptions.

Section 1.7 of Appendix I (Transportation Impact Analysis) says "However, the Project would not increase vehicle trips within the study area,…" This is an inaccurate statement. During the construction period of the Project, vehicular traffic will increase due to the increased number of trucks moving into the Project area. Additionally, while temporary in nature, the projected construction period (approx. 28 weeks) is not an insignificant time and does not account for any delays in construction which may extend this period.

The period for collection of the Video camera data (April 15 – April 21, 2013) is not representative of the baseline. No evidence is provided that this period (either length of study or choice of days) is appropriate or representative of any proper baseline. This baseline is crucial to

the analysis. Section 2.5 or Appendix I (Transportation Impact Analysis) says " …the video count data was the primary source of train crossing information to perform the transportation impact assessment for the Project."

The estimated delivery schedule provided by UPRR for the period of January 4 – January 14, 2013) has no validity to the study. The schedule is only an 'estimated prediction' of any then current scheduled delivery and does not provide number of train crossings. The date the schedule was given to Applicant or the consultants was not provided. The schedule has no basis or ties to the time of the Video camera data and is not comparable. The schedule does not reflect actual activity in any period. If any data was obtained from UPRR, it should have been during the same time as the Video data collection and should have included the actual deliveries, number of trains, manifest and length of trains, delivery destination, time of entrance into the Industrial Park, time of actual delivery, time for movement within the Industrial Park, and number of crossings, time to cross at-grades, and detail on any delays or blockages that impacted traffic or tenants' ingress and egress.

Further data in the form of intersection turning movement and vehicle classification counts was collected between September 6th and September 12th, 2013 because concern was expressed that the January period would be lower than average. This, in fact, was true. However, the period of re-examination was partially over the week and weekend following Labor Day – a typical period for vacation. Additionally, only some type of data was examined and the method of examination is not clear. Again, the baseline is further made murky and data across multiple periods is hobbled together.

While the number of vehicles is counted in the traffic study, the type of vehicle is not. Semi-trucks are considerably longer in length than a passenger sedan. When examining the vehicle back-ups, length of the impacted vehicles is a significant factor. Given that the area of examination is industrial in nature, it is more likely that such large trucks are in the area than in a non-industrial setting. Additionally, it is possible that this factor will have additional significance during the Project construction period and if the City of Benicia is successful in attracting additional tenants with businesses that rely on delivery (in and out) of goods involving large non-passenger vehicles.

The study concludes that the Project would not significantly increase hazards due to design features of the area (e.g., intersections) or incompatible uses because the increased frequency of train movement will not result in significant vehicle-train collisions (see Impact 4.11-3). This conclusion is erroneous at many levels.

a) Since the study erroneously concludes that the increase in frequency of trains will not result in increases in traffic congestion. To the extent this conclusion is false, the conclusion of no increase in hazards is false in the entirety.

b) The analysis limits the scope of a hazard to a vehicular-train accident. It does not examine other foreseeable hazards such as train-train collisions. It does not examine derailments or any effects of tank car leakage or fires therefrom that may occur at the intersections.

c) The conclusion assumes that because the Project does not physically alter the existing physical configuration of the roadway and does not introduce a "new" physical configuration that therefore the current design features and/or uses are not applicable for examination. This

conclusion fails to address the real issues of the existing configuration which are: *Does the introduction of increased train movement stress the existing physical configuration of the roadway and switching area*? *Is the increased frequency and length of train movement incompatible with the physical and structural restraints inherent in the existing area?* The study assumes that the existing infrastructure (physical makeup and use) is adequate for the changes inherent in the Project.

4. ANY INCREASE IN TRAIN TRAFFIC AND VEHICULAR DELAYS ONLY EXACERBATES THE SITUATION.

The Benicia Industrial Park consists of many business tenants. In fact, the City of Benicia is actively seeking new tenants for this area and business tenants are is important to the economic viability of the City. Impediments of traffic delays (and noise and other related variables) and any risks associated with the safety of the tenants, tenants' customers and/or tenants'employees are a significant deterrent to the City's plans for growth in the Industrial Park. Additionally, such negative impacts on the Industrial Park plans must also examine the addition of the Bus Hub and such increased train activity on the flow of traffic (foot and vehicular) and safety of any such Bus Hub participants.

In 2012, emergency response time for the project study area was already subject to higher response times than for the entire City of Benicia. This was noted in the transportation study. Data for 2013 (current study baseline) was not provided. We assume that project study area is the Benicia Industrial Park, but the sentence is not clear on the area. It is reasonable to assume that response time to any emergency occurring in the general vicinity, however described, will increase from the train and traffic impacts associated with the Project.

5. STATE AGENCIES HAVE NOTIFIED THE CITY OF BENICIA OF ITS MINIMUM REQUIRED ACTIONS

In multiple letters previously submitted by the California State Department of Transportation and the California Public Utilities Commission (see Appendix B to DEIR) each agency advised the City of Benicia that certain actions and impacts of the Project may require (i) additional information to be provided to such agencies, (ii) additional authorizations (permits) from such agencies, and (iii) a clear directive that Project impacts affecting the interstate and at-grade crossing must be seriously addressed and mitigated. Addressing such concerns requires clear delineation of the Project's impacts including, but not limited to, traffic and traffic queuing and weaving, emergency service response, compliance with the Americans with Disabilities, pedestrian circulation, and increasing traffic volumes. The State has made it clear the City of Benicia is responsible for the above actions inclusive of keeping the State agencies apprised of the issue. Therefore, it is imperative that any major flaws in DEIR regarding transportation and traffic must be identified and corrected. Failures of the baseline study and/or analysis will provide false results and thereby false analysis, conclusions, and mitigation plans. The City of Benicia will be responsible and liable to the State for any significant failures in the DEIR that result in actions or non-actions not in compliance with State regulations.

C. <u>Failure to utilize an accurate Project description results in the avoidance of examining reasonably foreseeable impacts inclusive of cumulative impacts</u>.

1. Siding of tank cars carrying crude oil is a significant safety issue which is not addressed in the DEIR transportation and traffic Sections. Increased use of siding means a greater probability of accidents (e.g. train car leakage, derailment or rail to vehicle accidents) due to the factors related to increased time on the rails and increased movement of trains. If for any reason, UPRR decides to bring into the Industrial area more tank cars than the Refinery can process in the immediate period, those tank cares will need to be put into siding.

Siding of tank cars means that more movement is required in this transportation process than if siding of tank cars is not utilized. For example, to bring a train into the Benicia Industrial Park and 'side' the train means that the train will need to be obtained again for movement at another time, thereby increasing the probability of its movement along the tracks and additional use of the at-grade crossings. This may increase impacts related to traffic and transportation. The study clearly notes that UPRR operations include switching operations which requires the "back and forth" and cutting of trains into re-configured train segments. During such 'cutting' activity, UPRR must move cars onto Park Road. Any increase in the use of siding will increase this cutting activity and equate to an increase in cars moving onto and blocking the road.

2. In addition to the false assumptions related to all variables under the control of UPRR, the study also relies on the perfect implementation of the Refinery's 365 - 7x24 tank car unloading operations. This reliance is absurd. No operation involving humans and machinery ever runs without certain failures. A small malfunction in the equipment may lead to a suspension of the operations to implement repairs. Any individual employee may become ill or otherwise indisposed. An earthquake could suspend operations. Any suspension in operations for any cause may lead to additional train congestions. The length of time will be specific to the cause and such causes can be multiple short delays (which add up) or multiple long delays. No consideration in the traffic and transportation analysis is provided for such events which are reasonably foreseeable and, in fact, should be blatantly apparent.

3. The City of Benicia's plans for the Industrial area are not considered in the projections for future traffic and transportation and/or the cumulative analysis. These plans (inclusive of the Bus Hub and other industrial growth objectives – increase in tenants) are reasonably foreseeable especially since they are in a written plan. Therefore, it is imperative, especially since the Project operations may extend in perpetuity, to examine these factors in the analysis as required by CEQA.

4. A careful examination of Figure 3-1 (Existing Plus Project Queueing Analysis) and4-2 (Cumulative Plus Project Queueing Analysis) strongly supports the failure of the traffic study. In each depiction, The No Project (current existing traffic queue length) is greater than the Plus Project traffic queue length. This defies logic and it must be concluded that the study is fatally flawed. In any circumstance (even using the assumptions of scheduling and train volumes not under the control of Applicant) train traffic will increase in the Industrial area. In any reasonable analysis, the increase in train traffic could not result in less impact than current conditions. [Note: the study references a Figure 3-2 which is not included in the report].

5. The traffic study claims that the probability of an emergency incident occurring at the same time as a Project train crossing is low. No evidence is provided for this statement and no definition is provided for the modifier "low". Additionally, this statement is dismissive of the nature of the emergency and the number of humans or value of property involved in any single emergency incident. For example, a significant fire or explosion at the Iron Workers facility may result in a significant number of deaths and property damage which may have be mitigated but for the additional time emergency responders and their equipment were barred from the site. If the train is unable to move quickly, the situation becomes increasingly dire.

6. Any increase in the number of trains into the Industrial Park inclusive of sided trains will increase the likelihood of accidents (direct, indirect, and/or cumulative) and other hazards which are foreseeable but not examined. Such events may be minor or catastrophic in nature. A catastrophic event may significantly impact not only the traffic in the immediate Park Road vicinity but could impact other roads and structures outside of the Industrial Park. For example, if an significant explosion was the result of a train-train or train-truck collision and such vehicles carried highly combustible materials, such an explosion could a) shut down and destroy major roadways and the freeway, b) set off another explosive event such as the piercing of the nearby pipeline wherein such resulting destruction may destroy a larger area within the City of Benicia, inclusive of the Clocktower or Officers Row which are on the National Register of Historic buildings.

7. Impacts of transportation and traffic are not examined for the full scope of the Project which extends throughout the State of California.

D. <u>The significance criteria for the impacts of the Project on traffic generally and the at-grade crossing remain significant and are not mitigated in the DEIR</u>. <u>Such impacts exist currently and the increase in train traffic may only exacerbate the current significant conditions. Evidence and a sufficient analysis is not provided to the contrary. Mitigation proposed is either not viable or not legally implementable</u>.

Significant impacts include:

- The rail crossing activity will cause vehicular queues that will impeded other traffic, such as queue spillback to the freeway mainline or to an adjacent intersection and traffic not destined over the crossing will be unable to continue along the travel way.

- The Project would result in increase in traffic levels that result in substantial safety risks.

- The Project would substantially increase traffic hazards due to the proposed increased frequency and length of trains and length of train crossings.

- The Project would result in inadequate emergency access.

- The Project does conflict with the City of Benicia's plans regarding public transit, bicycle or pedestrian.

Based upon reasons set forth above (false uncontrollable baseline assumptions and analysis) all impacts remain significant. This failure to successfully examine impacts also means that any examination to any plan (city of Benicia, Solano County Congestion Management Program, etc.) is faulty.

The mitigation offered for reducing the significant delay in emergency response time to less-than-significant is not workable. Any reliance by the Benicia Fire Department on UPRR "expected train schedules" is not mitigating. First, expected train schedules are exactly as described – expected, scheduled and not actual. Freight trains are particularly subject to non-adherence to schedules. Emergency responders must have real-time, accurate information on train movements and placements in the Industrial area to best respond to an emergency. Schedules do not provide this accuracy. No evidence is provided in this report to support or provide an analysis of the accuracy of train schedules to actual train movement. Second, if the emergency occurs in an area blocked by a train, additional assistance from the Applicant's response team will have no bearing on the situation and particularly the response time. All responders would be equally blocked from access. Additionally, mitigation by video camera will not mitigate response time for this event

RFIQS FOR SECTION 9 OF THE RESPONSE. The following Requests for Information and/or Questions are submitted for this Section 6 of the Response.

1. Can the Applicant control all UPRR scheduling, make up, number of cars, length of trains and all other variables assumed as fact for purposes of the traffic analysis as purported in the DEIR in a contractual or legally binding manner?

2. Can the Applicant prevent UPRR from siding crude oil tank cars (or, any other cars with commodities destined for the Applicant)?

3. Does UPRR have any 7x24 security personnel in the Benicia Industrial Park to safeguard any interference from terrorists or other interlopers from intentionally or accidentally damaging or interfering with any of the sided tank cars? If yes, describe fully (i.e., the number of personnel, their training and background, the amount of territory each person covers, other factors that would impact the sufficiency of the security).

4. If an emergency responder is prohibited or delayed from responding to a medical emergency or a fire at an industrial business when such business' entrance is blocked by a train, who is the liable party(ies) for any negative impacts associated with the blockage? For example, if the blockage by a train causes a delay in the emergency treatment of a patient that dies as a result of such delay.

5. Has the City of Benicia adequately examined the existing train and rail infrastructure to determine its compatibility and viability in light of its current and future plans for the Industrial Park area? If yes, provide such examination and related materials. If yes, was a formal report provided by an expert or other qualified individual or consultant regarding the limitations of the current rail infrastructure, such limitations' impact on any potential growth in the Industrial Park

area, and did it include any proposed modifications recommended for the infrastructure to be compatible with the City of Benicia's current plans?

6. Provide applicable data for 2013 to date, as available, for emergency response times for the project study area.

7. Provide applicable data for February 2012 to date for FRA collision history for the Park Road at-grade crossing. Additionally, provide any data for the period for collision history within the Benicia Industrial Park, regardless of location and for any type of vehicle or property wherein a train collided. For FRA data provided (and to be provided) identify the source of the reporting (e.g. the party), whether the reporting is mandatory or voluntary, whether the reports exclude certain types of data by certain variables (i.e., by cause, by type of train or commodity, others) and any other limitations of the data collected that impacts the results of the data being reported as comprehensive.

8. Provide collision history data from February 2012 to date compiled by the California Highway Patrol's Statewide Integrated Traffic Records System for any area within the Benicia Industrial Park.

9. Explain the method of collection of the intersection turning movement and vehicle classification counts collected in September of 2013. For example, was this done with the use of a video camera, or other?

10. Describe with specificity when "field reconnaissance" was performed (date and times) and the method (by whom, with what equipment, etc.).

11. Describe with specificity what satellite image observations were utilized (dates, times, areas).

12. Why was consultant FEHR PEERS omitted from inclusion in Chapter 7 (Report Preparation)?

13. Why was consultant ERM omitted from inclusion in Chapter 7 (Report Preparation)?

14. The facing pages of Appendix I (Transportation Impact Analysis) indicates that the report was prepared for Valero Energy Corporation ERM but contains the trademark of FEHR PEERS and ESA. Please explain the contractual relationship of the four parties. Was FEHR PEERS engaged by Applicant and/or ERM or ESA? Was ERM engaged by Applicant directly or other? Was the engagement of FEHR PEERS and ERM authorized in advance of the engagement(s) by the City of Benicia? Please be specific and provide all dates for the engagements.

15. Did UPRR provide and/or was UPRR asked to provide all available rail data to support the assumptions utilized in this report regarding the baseline and cumulative projections? For example, did UPRR provide data for the immediately prior 365 period (prior to the baseline) to demonstrate actual deliveries (inclusive of times and commodity) to the Benicia Industrial Park? Did any data include a description of the actual train movements (switching, cutting, shunting activity and timetables) associated with the deliveries and/or the movement of trains previously sided or sided?

Did UPRR provide any data to support the cumulative projections and assumptions thereof (e.g. UPRR future projected movement for the lifespan of the Project).

16. Provide better quality Maps and Graphics to show the movement of train and vehicular traffic within the Benicia Industrial Park as well as any current or planned infrastructure modifications. Show clear rail lines and clearly mark siding, crossing and shunting/switching areas. Identify any areas near the rail or roadways that contain other flammable, combustible materials, pipelines, structures or commodities that may be involved or contribute to any potential accident or event emanating from any accident occurring on the rails in the vicinity.

End of BSHC Section 9: Response to Sections 4.11 and 5.4.3.11 (Transportation and Traffic)

SECTION 10: BSHC RESPONSE TO SECTIONS 4.2 AND 5.4.3.2 (BIOLOGICAL RESOURCES) OF THE DEIR

10.0 OVERVIEW

The Biological Resources sections of the DEIR fail to provide clear writing and organization and are substantially descriptive and narrative.

The sections use terms to identify and describe "areas" (some ill-defined and some not defined) inconsistently. When addressing where species reside, nest, breed, etc., it nearly impossible for the reader to determine (especially for the discussion of impacts and mitigation measures) the exact areas (and characteristics thereof) referenced. To avoid redundancy in this Response, not all flawed usages are highlighted and the examples provided are not exhaustive. This problem coupled with the inconsistent use of (or interchangeability of) such terms makes it difficult for the reader to accurately identify, understand, and generally confirm any conclusions about the overall environmental impacts for the biological resources in this DEIR. In the text, conclusions applicable to the entire Project are presented prior to the discussion and analysis. This requires the reader to search forward and hunt for detail. When provided, details are often spread-out through the section and piecemealed.

The Biological Resources sections of the DEIR is conclusory and contains unsubstantiated analysis.

The examination provided is conclusory throughout the document and does not provide analysis or support for all conclusions, including the determination of the significance of the Project's impacts.

The Biological Resources sections of the DEIR fail to examine the full affected area. Conclusions reliant on the flawed Project description examination and scope are unsupported. The unsupported conclusions lead to flawed identification of impacts (direct, indirect and cumulative) as well as flawed significance levels and, mitigations. Additionally, reasonably foreseeable impacts are ignored.

The analysis omits an examination of any potential impacts of the Project except those limitedly related to construction area or the operation of the emptying of the tank cars within the construction area. A full and honest analysis of potential impacts to Biological Resources resulting from activity on the rails (e.g., more than 'spills'), even within the Refinery property and the Benicia Industrial Park, is primarily ignored and/or only mentioned without adequate discussion. Limited discussion is provided for Suisun Marsh but it ignores all other areas along the rail where crude feedstocks are traveling to the Refinery.

The Biological Resources sections of the DEIR relies on assumptions not under the control of Applicant or the City of Benicia.

The analysis relies on facts and assumptions regarding the logistics and operations of UPRR which are not under the control of Applicant and are not subject to any imposed mitigations by the City of Benicia to the extent such mitigations are not legally binding and enforceable.

Examples of the above are provided more specifically below.

10.1 PROJECT STUDY AREA

10.1.1 Project Study Area is ill defined and inconsistently applied. As used in Section 4.2 of the DEIR, 'Project Study Area' is inadequately and confusingly defined. We can only infer from the text provided that Project Study Area may mean any or all of the following: Project construction footprint, direct impact area, localized surroundings adjacent Sulpher Springs Creek, indirect impact area. Additionally other ill-defined terms are used throughout such as 'construction footprint' and 'quads', 'Project Area'. Should we infer that the construction footprint is limited to the construction area on refinery property? If so, then within the discussion of construction footprints, how does the DEIR properly conclude that the analysis of the construction footprint is applicable to the entire Project? Additionally, some terms are used interchangeably – in the same discussion. It is impossible from the poor, inconsistently applied and interchangeable descriptors to properly ascertain the areas of discussion and any conclusions therefrom. Generally, defined terms used elsewhere in the DEIR should be applied consistently throughout the DEIR and specifically to the Biological Resources sections. Absent this consistent application, the text is confusing and non-communicative. Where further delineation is required within existing terms (e.g. further subsets of defined areas), such terms should be clearly defined and all terms defined should be used consistently throughout. Maps and other graphic depictions should be presented for all defined subset areas.

10.1.2 Maps and Graphic Depictions are needed. The graphic depictions provided do not provide sufficient detail to support the analysis in the text. By way of example, it is not possible to independently ascertain that Sulpher Springs Creek runs outside the boundaries of the Refinery property. Maps and other graphic depictions should be provided to adequately verify all descriptions and/or areas examined (local and regional) and their specific boundaries as referenced. Care should be taken to specifically denote within such Map(s) the exact descriptors used in the text. Additionally, such depictions should encompass the next outlying areas, e.g. Suisun Bay, since the impacted areas abut and/or flow to Suisun Bay.

10.1.3 The Project area as examined in Sections 4.2 and 5.4.3.2 is not sufficient. As previously discussed in this Response, the direct and indirect impacts of the Project extend within the State of California along all points of the rail that are utilized to transport the crude oil to the Refinery. Such areas, especially through or near environmentally sensitive areas with foreseeable potential impacts to biological resources, should be more fully examined.

10.2 PROJECT SETTING

10.2.1 Refinery Property is not limited to the construction area. The conclusions in the section entitled "Refinery Property" is unsupported. This section indicates that certain vegetation communities occur on the Refinery property but that "…*no elements of the Project are proposed within these vegetation communities, and no Project elements involve the treatment plant outfall that connects the Refinery to Suisan Bay*". First, the Project impacts and elements thereof extend beyond the construction area/tank unloading area. The Project impacts areas in both the construction zone as well as along any points of

UPRR/Valero track in and outside of the Refinery that is transferring crude oil cargo to be delivered to the Refinery. Therefore, the statement cannot be supported since no evidence or analysis was provided that train movement (directly or indirectly) does not impact vegetation along the rails whether on or off the Refinery property. For example, the impact of a crude oil spill or fire resulting from an event along the rails within or near the Refinery property may result in the crude oil (either in its undiluted form or diluted per chemicals utilized in the event of a fire) to spread and/or drain and/or spill into Sulpher Creek and into the Suisan Bay. Secondly, no evidence or analysis is provided to support the assumption that "…*no Project elements involve the treatment plant outfall that connects the Refinery to Suisun Bay"*. This conclusion is unsupported. "*Project elements*" are not defined nor fully disclosed as used in this section of the DEIR. The reader should not need to guess at the meaning.

10.2.1.1 Annual Grasslands.

a. This section of the DEIR concludes that annual grasslands would not be affected by the Project. This is an overly broad conclusion. This section only identifies the annual grasslands situated within the Refinery property. At best, the conclusion may only be extended to the Project's impact on annual grasslands on the Refinery property. No discussion, analysis or evidence is provided to support the broader conclusion. In fact, annual grasslands may be prevalent all along the UPRR impacted track, in and outside of Benicia. Additionally, other indirect impacts of the Project on annual grasslands (e.g., spills, air emissions) are not analyzed, regardless of location on or off the Refinery property.

b. In this section, no evidence or explanation is provided as to why the Project would have no impact on the annual grasslands. No reasoning is provided to support this conclusion. The text merely describes annual grasslands within the Refinery property and then concludes that such grasslands would not be impacted by the Project, in the entirety.

10.2.1.2 Coyote Brush Scrub.

a. This section of the DEIR concludes that coyote brush scrub would not be affected by the Project. This is an overly broad conclusion and unsupported. This section only indicates that coyote brush scrub is situated within the Refinery property. Therefore, the conclusion may only be extended to the Project's impact on coyote brush scrub within the Refinery property.

b. The discussion indicates the association of some coyote brush scrub as a high priority for the California Department of Fish and Wildlife as some species use the coyote brush scrub within the Refinery property. While this statement may be factual, no explanation is provided regarding the specifics of the interrelationship (e.g., specifics of use, other reliance) between the species and the coyote brush scrub.

c. In this section, no evidence or explanation is provided as to why the Project would have no impact on the coyote brush scrub. No reasoning is provided to support this conclusion. The text merely describes such scrub within the Refinery property, denotes some species reliance on scrub, and concludes that such scrub would not be impacted by the Project in the entirety. Additionally, while noting

species reliance on the scrub, it provides no explanation for the such text in this paragraph and provides no discussion or evidence for its inclusion here.

10.2.1.3 Freshwater Emergent Wetlands.

a. The description indicates that freshwater emergent wetlands can occur in areas traversing the Refinery property and in conjunction with Sulpher Springs Creek. However, the conclusion provided says that "*Freshwater emergent wetlands would not be impacted by the Project.*" Therefore since the examined area, at its broadest, is limited to the areas identified traversing the Refinery property and /or species limited to the Refinery property, the analysis cannot conclude that the Project, in the entirety, is not impacted. No evidence is provided that the Project has been examined.

b. The same errors noted in Section 10.2.1.2 above for coyote brush scrub are present here for freshwater emergent wetlands and supported species.

10.2.1.4 Riparian

a. If the analysis is restricted to the a specific area inferred from the description of riparian zones to include Sulphur Springs Creek and other drainage swales within the Refinery, then the conclusion of 'no impact' may not be extended to the broader Project.

b. In this section, no analysis is provided to support the conclusion that riparian zones would not experience any direct impacts.

10.3 PROJECT CONSTRUCTION FOOTPRINT.

10.3.1 Developed. Bats, Raptors, and Ground-nesting birds. The discussion indicates that a variety of bat species will sometimes roost in industrial buildings, raptors will sometimes nest inside or on exterior ledges of industrial buildings, and ground-nesting birds will sometimes nest on margins of industrial roads.

10.3.1.1. Ground-nesting birds. The discussion concludes that ground-nesting birds are likely to be deterred by current operational traffic volume on Refinery roads This conclusion assumes that (i) all Refinery roads are equally and currently well-traveled, and (ii) there will be no increase of traffic on existing Refinery roads due to the Project. However, no evidence is provided regarding the existing traffic volumes on Refinery roads (no baseline provided), assumes all roads utilized for the Project are and will be the traveled equally, and (iii) does not account for any increase in operational traffic during either the construction phase or operational phase of the Project.

10.3.1.2 Bats and Raptors. The discussion indicates that no raptors or bats are known to use Refinery structures, and that the Project would not impact Refinery structures. This conclusion assumes that no bats or raptors use Refinery structures but provides no evidence to support this assumption and, specifically, how it is "known".

10.3.1.3 The analysis does not provide any information or assessment on Bats, Raptors and Ground-nesting birds inside the Refinery Property that may be impacted,

directly or indirectly, by the introduction of new rail lines. The analysis does not provide any information or assessment on Bats, Raptors and Ground-nesting birds outside of the Refinery Property that may be impacted by increases of traffic inclusive of auto and rail traffic.

10.4 SPECIAL-STATUS SPECIES

10.3.1 (Table 4.2.1: Special-Status Species Considered For The Proposed Project ("**Table**"). The Table is inadequate for the following reasons:

10.3.1.1 While we can identify the "source" of the letters/numerals used in the second column of the Table, we have no explanation as to the meaning of such designations.

10.3.1.2 To the extent the descriptions of the areas examined are murkily described and such terms are utilized in the Table, the potential for species occurrence (column four) is inadequate (see Section 8.1 above). Additionally, the text incorporates additional, new descriptors "localized area surrounding the construction footprint" and "limited habitat". We have no clear description for localized area. We can glean from the text that it includes a "limited habitat of 3,839 linear feet" but cannot determine the size of the localized area which contains such a "limited habitat". The introduction of further newly defined areas and their subsequent layering only exacerbates the underlying confusion in the document.

10.3.1.3 Overall designations such as Low, Moderate, and Unlikely are applied to describe the "potential of species occurrence" in column four. However, these descriptors are not fully defined. By way of example, what is the difference in designation between Low and Unlikely?

10.3.2 The statement that the *"…special-status species in the Suisan Marsh would only be potentially impacted by the Project through disturbance from an increased frequency of railcars or from an accidental spill"* is technically incorrect. Such special-status species may also be impacted by other intentional and accidental events inclusive of explosions and fires and related aftermath events (fire suppression chemicals, increased human activity, etc.). Such impacts are not fully explored, described and the statement is minimizing and dismissive.

10.5 SPECIAL STATUS NATURAL COMMUNITIES

10.5.1 The conclusion that "*Coastal Brackish Marsh and Northern Claypan Bernal Pool have the potential to be impacted by the Project only if there were an oil spill in the Suisun Marsh*" is unsupported and conclusory. The DEIR confirms that the species are found within the Refinery property and along the railroad but no information is provided to explain or support the conclusion of no impact. What elements are missing in the environment or present in the environment that would be evidence of an impact or no impact? Additionally, the footnote provided (5) for this section requires explanation. The footnote implies that plant information was not available to determine the classifications. The conclusory statement that only an oil spill in the Suisun Marsh is a possible impact is minimizing and dismissive. See Section 10.3.2 above for an explanation (same flaw).

10.6 REGULATORY SETTING

10.6.1 The DEIR lists and partially describes various regulations and plans. The scope and applicability of all such noted plans and regulations are not adequately discussed in the DEIR. Some plans and/regulations identified attempt to address applicability to the Project (e.g., under the Migratory Bird Treaty act, the DEIR says that '*Most Project-area bird species and their occupied nests are protected under the MBTA*"). However, some plans/regulations cited are silent on their applicability to the Project (e.g., under the U.S. Army Corps of Engineers, no mention of its relationship to the Project is discussed). If any cited regulation and/or plan are listed in the DEIR, the reasoning for both applicability or non-applicability should be provided. As currently drafted, the reader has no explanation for why certain plans/regulations are listed.

10.6.2 The DEIR notes that "some" plans account for the transportation of hazardous materials by rail. While this statement may be accurate, it fails to fully address the current, actual setting and is misleading. The introduction of the specific crudes subject to rail transport pursuant to this Project is recent. At the time of the plans' adoption, information on the volatility and/or environmental hazards specific to these crudes was not known. Therefore, any such plans could not have developed or addressed the crudes proposed to be transported pursuant to the Project and any such plans may not be sufficient to meet the demands of the specific crudes. The federal government (e.g. DOT and PHMSA) has just recently commenced investigations into the hazards associated with such crudes via rail and any subsequent regulations emerging from the studies and analysis are not in place and may not be in place for several more years.

10.7 DISCUSSION OF IMPACTS AND MITIGATION MEASURES/PROJECT STUDY AREA

10.7.1 Previous discussion in this Section 8 of the Response addresses conclusory statements and other flaws regarding the species identified and will not be restated here. However, any failures of those sections, extend to conclusions drawn in the discussion of impacts and mitigations and until corrected cannot be considered. Additionally, this section focuses on construction issues only and offers no substantive discussion or mitigation provided for other potential impacts present in the Project area especially during operations, such as spills, emissions related to engines, tank car coupling leaks, etc. that may impact species.

10.7.2 It is conclusory and false to assume that *"…any birds that subsequently nest nearby are presumed to be tolerant of the disturbance*". No evidence is provided that the new disturbances (e.g. increased activity, movement and noise – human and machinery) is at a level that crosses a boundary of tolerance. This is a presumption not in evidence.

10.7.3 The Mitigation measure 4.2-1 proposed is flawed for the following reasons:

- It addresses construction activity, and not long term operational activity.

- It assumes, but provides no evidence, that a "buffer" is an adequate to deter disturbances. It does not describe the impacts of a buffer (e.g. types of noise of decibels reduced)
- It does not describe a "buffer" fully (e.g., material, thickness, limitations, etc.) nor identify the minimum requirements for such a mechanism other than number of feet.
- It does not describe specifically the function of a "buffer" (e.g. does it filter noise, hide visuals, other?)

The DEIR concludes that the potential adverse impact to nesting birds is significant absent any successful mitigation; therefore, the mitigation proposed must be examined fully.

10.7.4 Impact 4.2-2 is flawed for the following reasons:

- 'Active work areas' within the Refinery are not disclosed fully and "restriction" efforts are not discussed.
- The project construction period is assumed to occur during the low-flow period of April 15 through October 15 when rainfall is not anticipated. This is an assumption not in evidence and not a requirement.
- The assumed construction period for Impact 4.2-2 (April 15-October 15) is not the identical construction period proposed for the prior Impact 4.2-1. In fact, the two periods are mutually exclusive if the construction period (as described) runs for 25- 28 consecutive weeks. Implementing the proposed construction period for Impact 4.2-2 means that the period of February 15 through August 31st – the period proposed as a blackout period to avoid nesting season of the birds - may not be fully avoided. This means that the seasonal avoidance proposed for Impact 4.2-1 is not possible.

The DEIR concludes that the potential adverse impact to the Sulphur Springs Creek riparian corridor is significant absent any successful mitigation; therefore the mitigation proposed must be examined fully.

10.7.5 Impact 4.2-4 is flawed for the following reasons:

- There is no evidence that "downward" lighting reduces the impact on the wildlife identified (conclusory statement).nor specifics on the range of the downward lighting (e.g. within x number of feet from the corridor).
- There is no evidence that the Applicant will implement any special "downward lighting" for the construction period or the operations.
- There is no evidence to detail the effects of any "lighting" and its impact on the species.
- It is possible that "lighting" during construction and/or operations may need to be directed outward since humans and machinery may need to have visual clarity to move around the circumference of the specific construction zone for safety and other reasons.
- No discussion of monitoring and enforcement for this mitigation is provided.

10.7.6 Impact 4.2-5 is flawed. First it only addresses "construction" and no other operational activities within the Refinery but concludes no impact to the entire Project. Second, it provides no specific discussion on why the plans and programs mentioned are in conformance with the specified plans, policies and programs (conclusory). Finally, it

provides no full discussion regarding why other cited plans, policies and programs are not applicable to the Refinery – limited text merely, in some cases, again provides conclusory statements only.

10.8 DISCUSSION OF IMPACTS AND MITIGATION MEASURES/SUISUN MARSH

10.8.1 As discussed in Section 8.6 of this Response, the analysis provided to support the conclusions that (i) crude oil accidents on the rail are a finite risk and (ii) marine ship trip reductions of 82% will decrease the risk of adverse effects to the marsh, is flawed and invalid. These conclusions may not be applied to an assessment of risks to Biological Resources in the Suisun Marsh.

10.8.2 Impact 4.2-6. The facts submitted to support a No Substantial Adverse Effect on special-status wildlife species is unsupported.

10.8.2.1 The DEIR states that "*Noise pollution is a concern to wildlife conservation*" and that the increasing volume (number or duration) of railcars travelling through the marsh, which increases noise and vibrations, would impact species negatively. While a plethora of studies focused on the effects of train noise on wildlife may be absent, the absence of such studies does not mean that the conclusions drawn should assume no or no significant impact. This is false reasoning. The absence of research means that no conclusion (impact or no impact) may be drawn from this arena. Therefore, we must exercise some common sense to determine potential impacts and look to the limited, but not insignificant, studies that have been conducted to the extent such studies are sound and inferences may be drawn.

10.8.2.2 The "Scotland" study conducted by a researcher at the University of Edinburgh has little value to the facts associated with the train movement along the Suisun corridor. In fact, other than noting that trains produce noise that may be experienced by birds, the study offers no other comparable facts and data to the current situation. The Scotland study only measured noise emanating from specific type of trains (specifics not provided). No data is provided on the weight of the train or engines or types thereof, frequency of movement, duration of the train (length and speed) over the measured point(s), quality and/or condition of the tracks, short-term related startle noises, etc. All the aforementioned variables contribute to both noise and vibrations (see Section 11 of this Response on Noise). This <u>one</u> isolated study provides no value to the DEIR analysis.

10.8.2.3 The statement "*The species currently inhabiting areas within 200 meters of the railroad are presumably habituated to the current level of railcar traffic, else they would not be present*" may not be made. Reliance on the 200 meters as significant is derived from the Scotland study and such study only examined birds (not all species) and such examination did not measure other variables essential to make this statement (see Section 10.8.2.2 above). Additionally, the analysis assumes that noise that may or may not impact birds (which are not identified) in Scotland, will have the same impact on birds in the Suisun Marsh.

10.8.2.4 Assumptions relying on the number of trains traversing the area may not be made. Even the DEIR concludes that the Applicant cannot dictate scheduling, number of cars in any manifest, type of engines, etc. UPRR may provide the crude feedstock in any

configuration and per any schedule it deems is appropriate for its logistical purposes. Train cargo (inclusive of crude feedstock) may be transported and stored along siding areas per the convenience and priorities of UPRR.

10.8.2.5 The DEIR notes that the number of trains running during the nighttime may increase but that this nighttime noise will have no impact since there is an expectation species will habituate. This assumption is unsupported by data, studies and common sense. The analysis attributes the same value of noise to nighttime train activity as to daytime train activity. Humans are more sensitive to nighttime noise than daytime noise (see Section 11 of this Response on Noise). The acceptable decibel levels adopted by cities for nighttime are higher than for daytime (e.g., see City of Benicia's noise regulations). Absent data and studies to the contrary, it is more reasonable to assume that any species may also be more sensitive to nighttime noise and vibration disruptions. Regardless, it is erroneous to assume that any increase in nighttime noise will result in habituation and tolerance.

10.8.3 Impact 4.2-7. A No Substantial Adverse Effect from oil spilled in the Suisun Marsh is unsupported and does not address all incidents probable.

10.8.3.1 The analysis only addresses an oil spill resulting from derailment or the breach of the integrity of a tank car resulting in spillage. Therefore, the following events are not examined: increased human and machine activity subsequent to any incident on the rails (e.g. clean-up), use of chemicals, water or other non-native materials into the Suisun Marsh subsequent to any incident on the rails (e.g. clean-up), the event of an explosion or fire, inspection and increased maintenance activity associated with the rails by UPRR (assumes UPRR may need to enhance such activities due to the increased risks associated with the increased frequency of transportation of such crude feedstocks).

10.8.3.2 The analysis acknowledges that "…*the aquatic character of the Suisun Marsh and the number of special-status organisms it supports make it an especially vulnerable location for a large spill*". However once again the analysis relies on a statistic that is erroneous, specifically, that the risk of a spill greater than 100 gallons is low therefore the impact is less than significant. In addition to the flaws in the risk assumption for a spill's rate of occurrence, the analysis fails to document why 100 gallons is the appropriate benchmark for significance of a spill and fails to address other 'incidents' that may occur along the rails.

10.8.4 Impact 4.2-8. A No Substantial Adverse Effect on federally protected wetlands is unsupported and does not address all incidents probable. The analysis and conclusion fails for all the same reasons previously noted above in Section 8.8.3 and will not be restated here. Additionally, regardless of any statistics prediction of an event, all probable events if they occur may result in damages that are significantly high and irreversible to the environment.

10.8.5 Please note that subsection d) and e) are not provided. The document skips from section c) to section f). Reader assumes this is a typographical error.

10.8.6 Impact 4.2-9. The DEIR concludes that the Project is in conformance with applicable habitat conservation plans and as such, has less than significant impact. This conclusion is less than honest. Plans currently in existence that may recognize the existence of rail track through the environs may not have anticipated the transportation of and increases associated

with the particular crude oil feedstocks specific to the Project. In fact, at the time of the plans adoptions, the Refinery has no ability to accept such feedstocks via rail. This would have required an agency's prediction of a future event. This event and its consequences were not predicted by the federal regulatory arms that govern the railroad. The transport of the crudes specific to this Project could not have been reasonably anticipated given that the nature and consequences of such transportation are only now being noted and are the subject of current analysis. Therefore, the statement that such plans account for the transportation of these specific crudes in the anticipated volumes solely based upon the existence of rails in the area, is neither factual nor logical. Additionally, the analysis provides no evidence that any of the plans' makers had knowledge about the specific crudes (and their properties) or the increase of transportation of such crudes through the Suisun Marsh at the time the plans were adopted. Therefore, the less than significant impact designation cannot be supported.

10.9 DISCUSSION OF CUMMULATIVE BIOLOGICAL RESOURCES

10.9.1 All erroneous and unsupported conclusions drawn, referenced and relied upon and inferred from Section 4.2 of the DEIR, must be dismissed for the cumulative discussion of Section 5.4.3.2 of the DEIR. The material will not be fully reiterated here again.

10.9.2 The DEIR states that "*The Project has potential impacts on biological resources in the Project area and along the railroad system between the Refinery and the City of Roseville*". In fact, the Project has potential impacts on biological resources in the Project area and along the railroad system between the point of origin (crude oil supplier) to the California border and then from the California border to the Refinery. To limit the commencement of the discussion of impacted areas to Roseville is misleading and designates the nearest used UPRR rail yard as an arbitrary starting point. CEQA is a set of regulations specific to the State of California. If not for the Project, the crude oil feedstock destined for the Refinery would not be sent via rail and this DEIR would not be addressing any rail related potential impacts to the environment specific to California. The DEIR provides no clear evidence or reasoning for the use of the City of Roseville as a valid starting point for the environmental review.

10.9.3 Table 5-1 (Potential Projects For Cumulative Effects Evaluation) of the DEIR fails to incorporate, discuss and evaluate the Kinder Morgan project (Richmond) and Targa Resources Partners/TRC companies Inc. project (Stockton).

10.9.4 The assumption that the cumulative increase in railcar usage would occur on the existing UPRR rail line and, therefore, additional Project related railcars to the state-wide network would not cumulatively contribute to the impact of biological resources is incorrect and overbroad. First, this DEIR does not examine the "state-wide network" of rail transportation. In the Biological Resources sections, no examination, discussion or analysis is provided for any areas other than the Refinery and, limitedly, the Suisan Marsh. Additionally, detail is not provided on the "baseline" and baseline usage – so no inferences may be made as to the actual changes to the baseline for the additional traffic associated with this Project and any other rail related project now in effect or reasonably anticipated to be in effect (exiting project). Even absent a "baseline" description, the DEIR provides no 'value' analysis for the impacts of any particular train and assumes all trains are equal. For example, should we conclude that the impact of one train = 1 and that impact of two trains = 2? Where

is the evidence that the value between 1 and 2 is equal and not merely arithmetic? Perhaps a species may tolerate 10 trains a day, but 15 trains a day is its threshold of tolerance. Additionally, the simple example provided above merely illustrates frequency as a factor and does not consider all the possible factors and/or their weighted values associated with any train that may have a cumulative effect on Biological Resources (e.g., speed, length, number of engines, condition of wheels and rail, etc.).

10.9.5 The assumption that the switch from ship transport to railroad transport reduces the likelihood for a spill and the associated clean-up efforts is erroneous. As previously discussed in this Response, the assumption that ships are the lesser environmentally risky modes of transport is false. Additionally, this assumption dismisses the risks associated with train transport of crude oils that involve explosions and/or crude oil damage to rivers and other land bound waterways as evidenced in the recent past by accidents in the US and Canada. It is the mode of transport and the risk associated with such mode of transport that is the risk factor, not the mere frequency of traffic between ships and rail. Finally, there is no evidence provided to support the assumption that an accident resulting from rail related spills is easier to clean-up and contain and less damaging than an accident stemming from a maritime event.

RFIQS FOR SECTION 10 OF THE RESPONSE. The following Requests for Information and/or Questions are submitted for this Section 10 of the Response.

1. Define Project Study Area more specifically so that there is not misunderstanding about what land is included (or excluded) and revisit all other areas of the DEIR (Sections 4.2 and 5.4.3.2) and provide clarity on this issue within the text provided.

2. Define the area, if any, between the Project Study Area boundaries and the Suisun Marsh boundaries not examined in this Section 4.2 if such areas are contiguous/adjacent

3. Describe how the Project Study Area is/is not different from the Project (as defined in the DEIR).

4. Provide a Map and/or graphics sufficient to describe and depict all areas referenced in the Biological Resources sections of the DEIR and adjacent areas. Such depictions should be marked using the same terms used in the text of the applicable sections. (see Section 10.1.2 of this Response).

5. Elaborate on the specifics of the statement that the "*evaluation of the biological resources is based on a visit of the Project Study Area…*". Identify all party(ies) that visited the area, the date(s) and for what period of time? For purposes of this statement, describe the Project Study Area which was examined. What specifics were examined? Was the examination limited to viewing (sight only) and/or inclusive of any specific tests or use of apparatus? What conclusions were promulgated directly from the site examination (and not any other sources)? Was any information provided from other parties (Applicant, City, others) relied upon for purposes of this examination and not independently verified (if yes, identify the other parties and specific information). Define Project Study Area as applicable to this visit.

6. With respect to the 'riparian zone', explain the reasoning for the conclusion that for the California red-legged frog, individuals are likely to be transients and not disturbed by construction and operation of the Project. If the riparian zone is a movement corridor, why

wouldn't this species be disturbed by the activities of the Project (human and machine movement, noise, night lighting)? What is the value of the movement corridor to the species? Why are only transients (as opposed to non-transients) concluded as not disturbed? Additionally, please confirm that by operation of the Project, you mean the operations of the "off loading" in the off-loading rack area only.

7. For the discussion of Annual Grasslands, was reliance for the information regarding existence of identified plants within the Refinery property primarily obtained from the City of Benicia 2002 report?

8. For the discussion of Coyote Brush Scrub, reliance for information was obtained primarily for satellite imagery on the north-facing hillslopes within the Refinery property. What was the date (month, year) of the satellite imagery examined? Why were only the north-facing hillslopes examined and no other areas within the Refinery?

9. Explain the interrelationship (e.g., specifics of use, other reliance) between the species noted and the coyote brush scrub. Explain why the coyote brush scrub would not be impacted by the Project and specifically describe the area(s) intended to be included in the use of the term Project.

10. Define and explain "*Project elements*" as this term is used in the Biological Resources sections.

11. Describe where the "*freshwater emergent wetlands"* occur and where the "*streambeds of several ephemeral or intermittent creeks*" traverse the Refinery property and/or in conjunction with Sulpher Springs Creek and the factors/conditions that lead to their emergence.

12. For the Western Pond Turtle, you indicate that the breeding is "*more likely to occur" upstream of the Project area*". Confirm specifically what you mean by upstream of the Project area. Is the Project area different than the Project Study Area? For this same species, provide your reasoning for the statement that they are unlikely to be disturbed by the construction and operation of the Project. Is this conclusion regarding operation of the Project restricted to the Project construction area, or other? What physical area(s) are you specifically referencing in the conclusion which encompasses the entirety of Project operations?

13. Support fully the statement that "*Riparian zones would not be impacted by the Project*….". Define specifically what you mean by "Project" in the context of this statement. Provide a full explanation for this conclusion. Provide factors that would impact riparian zones.

14. Provide the basis for the conclusion that the property has no roosting bats and raptors– define the data, process, etc. for the assumption of "known". For example, were the structures inspected by individuals during the roosting periods for any roosting species? (If yes, provide the names of the individuals).

15. Provide evidence of current baseline traffic for existing Refinery roads.

16. Provide detail discussion on changes to traffic on Refinery roads and all roads outside of the Refinery for increases in traffic due to the demands of the construction phase of the Project and the increases in traffic due to the demands of the operational phase of the Project.

17. Provide the "key" (explanation) of the letters/numerals used in the second column of Table 4.2-1.

18. Define more clearly the uses of the terms used in column four of Table 4.2-1 (e.g. Low, Moderate, and Unlikely)

19. Describe the specific impacts to special-status species in the Suisan Marsh and areas within the City of Benicia (Sulpher Springs Creek, Industrial Park, etc.) for any disturbances caused or related to events associated with the Project including, but not limited to, rails and tank car movement, explosions, fires, spills, emissions, clean-up efforts (chemicals used in such efforts), and impacts related to rain and drainage of such crude feedstock if exposed to such elements due to any event.

20. Explain in detail the footnote #5 provided for in the Special Status Natural Communities section. Why was detailed plant information not necessarily available and where was it unavailable – in the area studied, or in the classification systems? Explain the consequences/treatment of any species being subject to an assignment to the new classification system or the special-status classification system. Explain specifically any differences in the conclusions offered if any species in this analysis is subject to one or the other classification system.

21 Provide an analysis for the Biological Resources examined to include any direct and indirect impacts of the Project inclusive of biological resources impacted within the State of California (rail lines) omitted or not fully discussed in the DEIR including but not limited to impacts related to spills, leaks, emissions (tank cars, engines, off-loading operations, etc.) and any impacts related to the clean-up efforts related to spills or other accidental releases of the crude oil (e.g. chemicals used in such efforts) and impacts related to rain, drainage, etc. of such crude products if exposed to such elements due to any event.

22. For all regulations and plans listed in Section 4.2.2.3 of the DEIR, explain fully all such plans' and/or regulations' applicability to the Project or non-applicability.

23. Provide studies or evidence that a "buffer" will significantly deter disturbances associated with construction on nesting activities. Identify disturbances that a buffer mitigates and the extent of the deterrence.

24. Fully describe "buffers" required (make, manufacturer, material type, dimensions) and industry standards for buffers.

25. Will the biologist assigned to the monitoring of the buffered area and impact on nesting (i) have full control and authority over the affected area and operations inclusive of the ability to issue a Stop Work order immediately and for the required duration as required by the biologist as this biologist deems necessary, (ii) be supervised and under the control of a neutral party and specifically not the Applicant as the Applicant has an inherent bias to keep the work on schedule, (iii) will the Applicant be responsible to pay the biologist, (iv) will the biologist be chosen by a neutral outside party and not the Applicant, and (v) will the biologist also be the biological monitor on-site?

26. What is the level of effort will be required of the Applicant, if any, to schedule construction activities between February 15 through August 31st and avoid the nesting season and thereby avoid the need for the buffering mitigation (best efforts, commercially reasonable, reasonable in the Applicant's judgment, other)?

27. In the event of any then current circumstances (e.g. temperatures and seasonal factors) in effect that change the dates of the "nesting season", who will make the determination that the construction dates will adjust to the actual nesting season or will the Applicant need to adjust to the then current nesting season?

28. If the construction is 7x24, does this not require more than one biological monitor?

29. Explain why any "operational" activities that may occur during the nesting period, in any year, for the duration of such activities, do not require buffers, a biologist and/or biological monitoring? List all operational factors (noise, lighting, emissions, potential spills related to tank cars and offloading activities) that impact nesting birds (Impact 4.2-1) and provide reasoning and evidence that these operational factors have no impact.

30. Will there be any mandatory penalties (monetary or other) if the Refinery fails to implement the mitigation measure described and, if yes, are such penalties a sufficient deterrent (e.g., penalty imposed is more costly than the costs of not implementing the mitigation).

31. Describe the "active work areas" within the Refinery inclusive of any roads in service.

32. Since the periods recommended for Impacts 4.2-1 and 4.2-2 are mutually exclusive, which period will be the actual period for the construction?

33. How will the construction activities be monitored (and by whom) to confirm proper mitigation as described in Impact 4.2-2 is in place and adhered to and what penalties will be in available for non-adherence (scope, adequacy) and who has the authority to impose?

34. Provide evidence, research, and discussion on the effects of lighting on the species identified in Impact 4.2-4.

35. Provide evidence, research, and discussion to support that daytime noise has the same impact as nighttime noise on the species.

36. How will the lighting mitigation be monitored (and by whom) to confirm proper mitigation and what penalties will be available for non-adherence (scope, adequacy) and who has the authority to impose?

37. For Impact 4.2-5, describe specifically how the operational components of the Project will or will not conflict with plans, programs and policies.

38. For all events and accidents discussed in this Response (e.g. not limited to spillage), discuss the impacts on the species.

39. Confirm that the missing subsection d) and e) were typographical errors and not representative of missing sections that did not get printed to the DEIR.

40. Provide an analysis and discussion for Biological Resources as they may be impacted for the entire project where the project includes all points on the rail within California that may be utilized for the transport of the crude oil to the Refinery.

End of BSHC Section 10: Response to Sections 4.2 and 5.4.3.2 (Biological Resources)

SECTION 11: BSHC RESPONSE TO SECTIONS 4.10 AND 5.4.3.10 (NOISE) OF THE DEIR

11.0 INTRODUCTION

Noise is a significant factor in determining the quality of any neighborhood and work environment. People value quiet areas over noisy areas. Noise emanating from external sources can result in significant community annoyance, interference with communication and daily activities, sleep interference and other negative physiological and psychological impacts. The introduction of any new noise must be adequately assessed to determine the actual impact of the new noise on the existing environment inclusive of residents, wildlife, visitors, businesses and their employees and customers.

The Project will introduce new noise related to both short term construction and ongoing operations. While construction noise may be characterized as limited in duration (approx. 28 weeks), the ongoing operations must be characterized as long-term and permanent in duration. Ongoing operations will be in effect 365 days a year and 7x24. It is reasonably foreseeable that upon completion and implementation of the Project, any modifications made to the existing environment in the form of new noise will continue for decades.

Therefore, it is critical that the new noise introduced by the Project be examined thoroughly. The current baseline noise (exiting noise) must be adequately measured and analyzed for the specific new purpose. All new noise must be fully disclosed (inclusive of average noise levels and all intermittent noise levels by severity and frequency). Any failures of measure and disclosure of baseline and future noise will result in a false and inadequate analysis regarding the actual impacts of noise and vibration directly and indirectly resulting from the Project.

BSHC find that the noise assessment baseline study and subsequent analysis set forth in Sections 4.10 and 5.4.3.10 of the DEIR (the "**Noise Study**") is woefully inadequate, unrepresentative, not designed to measure noise for the purpose (full scope of the Project), relies on assumptions not in evidence and/or supported, fails to examine substantive short-term intermittent noises sources inclusive of frequency of occurrence and level of disturbance, and fails to properly access cumulative noise and vibration. Specifics are set forth more particularly below.

11.1 BASELINE. Inadequate evidence was provided to support the baseline assumptions for the Noise Study. A baseline study should be representative sample of the types of noise and areas potentially impacted by said noise (scope). The Noise Study fails as a baseline measure for the following reasons:

11.1.1 Period of the Study. The Noise Study provides no evidence that the time period chosen to conduct the Noise Study is indicative of the average activity in the area over any period other than the limited period studied. The limited period studied consisted of a measurement commencing Wednesday, February 20, 2013 and ending Monday, February 25, 2013 (the "**Period**"). The projected period of activity for the Project is 7x24, 365 days a year.

11.1.1.1 No evidence that the Period is representative of the of the Project period (7x24, 365).

11.1.1.2 No evidence that the excluded day(s) of Tuesday is not representative of the Project period (7x24, 365).

11.1.1.3 It is unclear if the monitoring for the Period commenced on Monday at a particular time (daytime, evening, nighttime) and/or the monitoring for the Period ended on Wednesday at a particular time (daytime, evening, nighttime). Therefore, it cannot be determined if the Period consists of six (6) 24 hour periods or other.

11.1.1.4 The party or parties who conducted the 2013 initial baseline study (the 2013 study used by Wilson, Ihrigh & Associates - Applicant's contractor - to evaluate noise level increases) is not identified in Section 4.10 of the DEIR. In fact, Section 4.10 of the DEIR only says that Wilson, Ihrigh & Associates conducted the noise assessment analysis (i.e. not the baseline study) to evaluate noise level increases due to train trips and operations of pumps (see Long-Term Operational Noise Impacts in the DEIR). For purposes of this Response, BSHC assume the preparer of the baseline study is Wilson, Ihrigh & Associates. However, this information should have been clarified and stated clearly and concisely. It is imperative for the reader to understand the original purpose and preparer(s) of the baseline study in order to access the adequacy of the Noise Study.

11.1.1.5 The original purpose and underlying assumptions of the 2013 baseline study is not provided in the text of Section 4.10 of the DEIR. Full disclosure of the baseline assumptions and purpose of the 2013 baseline study is critical. If the baseline study as developed, constructed and implemented was based upon assumptions that do not substantively match the full scope and parameters of the Project, the Noise Study, inclusive of the subsequent analysis, may be inadequate to meet the specific required elements and methodologies to properly measure new noise introduced by the Project (see Section 11.1.2 below for examples of failure of baseline study).

11.1.2 Location and Placement of Monitors.

11.1.2.1 The Noise Study fails to establish a baseline for any areas north and east of the refinery. Tenants of the Benicia Industrial Park (as well as their employees and customers) are impacted by any noise resulting from the Project. The Noise Study fails to establish a baseline for such potentially impacted parties. In particular, a baseline was not established for industrial tenants most closely situated to the Project Site (construction site) as well as the industrial tenants most closely situated to the UPRR switching site (Park/Bayshore/680). It is reasonable to project that the UPRR switching site will be a significant additional source of noise since the number of trains rolling through the Benicia Industrial Park will increase due to the Project.

11.1.2.2 The Noise Study fails to establish a baseline for the sensitive riparian corridor and the Suisan Marsh.

11.1.2.3 The Noise Study fails to adequately describe the modifiers of the noise measured between the generator of the noise ("**Source**") and the monitoring device ("**Monitor**"). The area between the Source and Monitor (the "**Path**") may be impacted not only by

distance but by water, hills, wind, temperature, and buildings. The Noise Study did not provide a detailed description of the modifiers present in the Path during the Noise Study. Additionally, these contributory factors are essential to determine the representative adequacy of the Noise Study.

11.1.2.4 The Noise Study fails to adequately identify the placement of the Monitor(s). Information was not provided for L-1, L-2, L-3, L-4 and L-5 Monitors to determine the exact placement details. While we understand the general location, we have no data on the exact address, the height of the placement, and other placement criteria which may impact the Path. This information is not only essential to determine the validity of the Noise Study, but is necessary to determine if any of the existing factors will be prevalent in the foreseeable future. By way of example, if the Path topography is modified by the removal or construction of a building, such modification may significantly impact the noise levels. The full Path should be examined as of the date of the DEIR analysis to determine if the modifiers present at the time of the baseline noise study are currently the same. The full Path should be examined for such potential modifiers together with the City of Benicia's general plan and land use to ascertain reasonably predictable potential modifications.

11.1.2.5 The Noise Study fails to establish a representative baseline for both Residential and Project Construction site areas.

(a) Residential. Absent the establishment of proper Path descriptors, it is not evident that the placement of the Monitors in the residential areas selected is adequate as representative receptors/receivers. For example, if a monitor was placed slightly south east of L-6 (see the Map provided as Figure 4.10-2 in the DEIR), the residential area's line of sight to the Project site is significantly different than L-6 residential area noted. It cannot be assumed that the two areas have an identical or similar Path to the Source.

(b) Project Site (construction area). The Project Site (construction area) is shaped in a long ovoid pattern. The sole monitor to measure baseline noise in the construction area (L-1) is placed at the extreme north point of the ovoid. A monitor is not placed in the concentric center nor is it placed at the southern-most point of the construction area ovoid. Therefore, this sole monitor is not strategically placed to measure sound in the construction area in general and ignores more than 60% of the construction area as marked (see Figure 4.10-2 in the DEIR).

11.1.3 Monitors. The Noise Study fails to provide specifics on the type of Monitor and the microphone positioning.

11.1.3.1 Full monitor description (make, model, new or used, omnidirectional), is not provided for each monitor by location. No explanation is provided for the choice of monitor(s) utilized nor its failure rates and/or industry valuation of quality and consistency of performance.

11.1.3.2 No description is provided for each Monitor's positioning of the microphone, specifically, its placement towards which Source (L-1, L-2, omnidirectional).

11.1.4 Data. No raw or detailed data is provided (by Monitor during the Period). Therefore, an interested party has no ability to independently verify the final calculations provided in Table 4.10-1 of the DEIR. Additionally, the Noise Study does not provide other common noise calculations and/or an explanation for their non-use such as:

11.1.4.1 A Maximum Noise Level (Lmax) used to measure a single noise event or maximum sound level.

11.1.4.2 A Sound Exposure level (SEL) cumulative noise from a single event or total A-weighted sound during the event (often the measure for wildlife impact events).

11.1.4.3 Community Noise Equivalent (CNEL) a community noise descriptor over a 24 hour period.

11.1.5 Type of Buildings. Noise impacts will vary based upon the construction of a particular receptor building (e.g., wood frame/stucco, insulation quality). Buildings in impacted areas (inclusive of residential and industrial) are not equal with respect to construction variables. For example, it may be reasonably inferred that not all residential dwellings are equally constructed and therefore the impact of noise on a particular residence and the occupants in the residence will vary. There is a correlation between the type (quality) of building construction and socio-economic factors. Poorer residents are more likely to reside in older buildings that are constructed with less insulation and less expensive materials. If noise impacts to these lesser insulated residences are greater, poorer residential areas will be impacted by noise to a greater extent than residential areas with higher income residents. No evidence or analysis was provided to address these variables and their impact on noise/vibration levels by building type.

11.2. OTHER ASSUMPTIONS FALSE, UNSUPPORTED AND/OR UNVERIFIED.

11.2.1 UPRR in not under control of Applicant (refinery). As discussed previously in this Response, Applicant cannot fully control activities under the direction and control of UPPR, namely, the number of trains, locomotives utilized (type and quantity), scheduling thereof, trains subject to idling, train cars subject to side storing, etc. Therefore, any assumptions used in the Noise Study to ascertain impacts from the aforementioned variables and noise Sources subject to UPPR control, are not credible. Credibility may only be ascertained through the provision of an analysis based upon a credible reasonably foreseeable scenario, which is not provided. At minimum, all variables under the control of UPRR should be examined cumulatively utilizing a scenario that accounts for all variables in play at maximum levels since this scenario is reasonably foreseeable.

11.2.2 The Analysis assumes only Residential Areas are impacted and ignores Industrial Area and sensitive wildlife areas.

11.2.3 The Analysis assumes only locomotive horn noise at Park Road crossing as the sole other primary potential single source, intermittent noise.

11.2.4 The Analysis assumes that noise associated with the Project operation would be primarily related to movement of tank cars and operation of the unloading rack pumps. This is a false assumption. Operational noise may include factors: idling engines, additional

switching and crossing noise, train whistles and bells, etc. (see noises identified in Section 11.2.7 below). These noises as a Source are also prevalent outside the area identified as the L-1 Project Site (e.g., Park crossing and RR siding areas). The analysis also assumes that the increased frequency of trains is the only viable variable to be measured since tracks already exist. This is a false assumption (see Source noises identified in Section 11.2.7 below). Finally no analysis or data is provided regarding the noise and vibration levels specifically associated with the unloading rack pumps (analysis for this source is only provided in combination with tank car movement).

11.2.5. Analysis ignores cumulative noise impacts throughout. Industrial and rail sites often generate multiple noises at frequent intervals. A-weighting averages applied in the Noise Study may not effectively measure these types of noises and/or vibrations or adequately describe the negative impact on the community. The A-weighting averages dismiss short-term noises, regardless of frequency and intensity. Short duration single event noise sources may significantly impact any individual's and/or community's sensitivities especially if the noise is frequent or especially annoying (e.g., train wheel squealing).

11.2.6 Assumptions related to Short-Term Construction Noise.

(a) No evidence was provided to support the assumption that a large bulldozer is the 'loudest' piece of construction equipment to be utilized in the construction area. Therefore, use of a large bulldozer as the highest noise indicator for comparison purposes is not supported.

(b) The construction area is significant in area (length). Assumptions related to the location of the equipment at the construction site are not validated as no information or data provided for equipment type(s) by specific location within the Project Site.

(c) Equipment list for construction area by type, quantity, duration of use, place of use, etc. is not provided. Assumptions made regarding equipment are not in evidence.

11.2.7. List of noises and vibrations not fully considered in the Noise Study individually and/or cumulatively:

a. Type of train
b. Number of train events
c. Number of train siding events
d. Length of train
e. Number of cars
f. Weight of cars
g. Speed of trains
h. Length of idling time
i. Type of engines
j. Number of engines
k. Conditions of Rail/track throughout (inclusive of siding and track type)
l. Conditions of wheels
m. conditions of switching areas
n. Type of horn/whistle/bells at crossing and non-crossings
o. Maintenance activities required on rail and for equipment in general (operations)
p. Additional traffic noise from waiting traffic/vehicles

q. Full noise impacts of operations (equipment individually and cumulative, people/PA systems, movement of machinery, unloading rack pumps)
r. Estimated site layouts of equipment along the construction area
s. Truck make-up
t. Usage of all construction equipment (time and cumulative)
u. Roadway conditions for equipment and truck movement
v. Types of Wheel/Rail Noise specifically:
1) Rolling Noise: interaction of steel wheels rolling on steel rails is a source of environmental impact. Wheel noise generated is impacted by smooth vs rough wheels and rail roughness or corrugations.
2) Impact Noise: wheel impacts at joint gaps as well as at crossovers and turnouts. Variables such as wheel flats (flat spot in the wheel), Rail joints (gap in track joint and running surface misalignments) and use of crossover frogs.
3) Squeal Noise: often occurs on short radius curves or crabbing of wheels on a curve.

11.2.8 Section 5.4.3.10 of the DEIR embraces all flaws inherent in Section 4.10 of the DEIR and others.

(a) Section 5.4.3.10 of the DEIR 'implies', but does not confirm, that the construction and implementation of a replacement hydrogen plant will not occur. Additionally, it says "*As described above…*" and does not reference where above in the DEIR is the description. It is not in the immediate prior paragraph.

(b) The DEIR relies on a VIP noise analysis to support a no cumulative noise impact. However, this crucial analysis is not provided in the DEIR and the date of the VIP noixe study is not clearly divulged. To the extent that the Noise Study is flawed, usage of the data and analysis further applied to a separate 2002? noise evaluation prepared for the VIP and any inference of the cumulative noise impact of the combined sources, are not valid.

(c) The same reasoning of subsection (b) hereinabove (i.e. the Noise Study is fatally flawed) may be applied to the other cumulative projects at the refinery. The combined studies are not a valid application to the impacts of the other cumulative projects.

(d) Finally, the less than significant conclusion assigned to the impact of the other cumulative projects at the refinery is flawed because 'distance' is identified as the only determining variable (one mile) and distance is not a sole noise source determiner.

11.3 SUMMARY

A significant failure of the DEIR's examination of the potential impact of noise is the irreparable flawed nature of the baseline study. The scope of the baseline examination is inadequate and fails to address and coincide with areas impacted, directly and indirectly, by the Project. If the baseline study is flawed and/or inappropriate for the purpose, it cannot be used to infer and project any future impacts of noise for the Project. Therefore, any analysis that uses the baseline study is invalid.

A further failure of the DEIR's examination of the potential impact of noise is that its analytical focus is limited to Source noise(s) in the form of construction and ongoing operational (trains) in the area designated as the Project Site (construction area and new train track area only). This

focus is erroneous and ignores the non-Project Site criteria and Sources, namely the area along the UPRR track in the vicinity. The increase in noise associated with the vicinity unexamined includes not only additional trains but all source noise associated with increased switching activities at the junction of the Park, Bayshore and 680 off/on ramps. We also note that the actual Project scope is from the point of entry of the crude oil trains into California to its Refinery destination. We again conclude that the effects of noise and all other impacts should be examined as applicable to all points on the rail. However, our discussion here focuses on the inadequacies of the Project Scope as narrowly defined in the DEIR wherein such inadequacies are fatal for an examination of the Project regardless of the scope definition applied. The same criticisms and errors illustrated in this more narrow analysis should be applied to the broader and actual Project scope.

To the extent the 2013 baseline study is flawed for this purpose (full Project evaluation), it cannot be used as a baseline of any future analysis inclusive of establishing any credible predictive noise levels, establishing any criteria (significant or not significant), determining any mitigation applicable, determining any compliance with any local general plan, noise ordinance or applicable standards of other agencies, and drawing any other conclusions. For this reason alone, the baseline data and study should not be used in the DEIR as a credible study or analysis for the prediction of future noise impacts directly or indirectly and/or cumulatively related to the Project.

Statements of Benician residents (refer to Planning Commission Meeting oral testimony to the DEIR of July 10th) indicate that residents are already negatively impacted by current noise and vibration activity emanating from the refinery and/or UPRR activity.

- A resident complained that currently her windows rattle (a cumulative vibration and noise impact) and she did not want any further increase of this unacceptable noise and vibration.
- Tenants of the Industrial Park area, especially tenants near or at the Park Road crossing, complain that the noise and vibrations associated with the train cars is currently unacceptable and disruptive to normal business operations.

Negative noise impacts already exist in the community and are of current great concern. The Project will only exacerbate the situation since it is more than reasonably foreseeable that any amount of increase in noise and vibration activity will reasonably increase the duration, frequency and intensity of these occurrences. If the impact is already considered 'significant' per the residents and tenants of the Industrial Park, then any increase must, at minimum, be considered significant.

There is no "bright-line" to ascertain when and at what level noise/vibration in an environment moves from acceptable to unacceptable. Any evaluation of noise and vibration must use objective and subjective criteria. Individual reactions to long-term noise and tolerance of frequent short-term significant 'startle noise' will vary. However, the failure to adequately examine the tolerance levels, even if partly subjective, may lead to long-term negative and significant impacts. If residents deem the noise and vibration levels unacceptable, they may move from the impacted area. Such movement can irreparably change the make-up (socio-economic) of the City of Benicia permanently. If industrial workers and business owners deem the noise and vibration levels as interfering with work productivity and customer satisfaction,

such businesses may move from the impacted areas. Any significant movement of residents and businesses may have a significant impact on the City of Benicia's general plans and specifically plans for the industrial area. General decay of a residential neighborhood and/or vacancies in the industrial area may be significant foreseeable socioeconomic impacts attributable to noise associated with the Project. Once the Project is permissioned and the related new noise is in effect, the City's ability to effectively mitigate is non-existent.

CEQA requires adequacy, completeness and a good faith effort of full disclosure (Guidelines § 15003(i)). Sections 4.10 and 5.4.3.10 of the DEIR fail to meet this minimum criterion. Due to the flaws identified in the 2013 baseline study together with the incomplete analysis of scope of noise and vibrations as set forth above, no valid conclusions may be drawn from Sections 4.10 and 5.4.3.10 of the DEIR to determine if the Project would cause adverse significant noise impacts as defined in CEQA. Therefore, it is not currently possible to determine if the Project would cause adverse noise impacts that would result in any of the following either singularly or on a cumulative basis:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of, excessive ground borne vibration or ground borne noise levels;
- A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project; and
- A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

RFIQS FOR SECTION 11 OF THE RESPONSE. The following Requests for Information and/or Questions are submitted for this Section 11 of the Response.

1. Provide a detailed explanation and all facts not in evidence regarding the original 2013 baseline Noise Study including, but not limited to, the original scope and purpose of the study, the methodology applied to choose the Period, basis of determination that the baseline study is representative for purposes of the Project evaluation.

2. Identify the primary decision maker who made and/or exercised decision making control over the assumptions, scope of study, dependencies, parameters, and all other primary decisions required for the 2013 baseline of the Noise Study.

3. Provide all raw data collected from the monitors over the Period during the baseline Noise Study sufficient for an interested party to validate the results and calculations in the DEIR.

4. Provide all raw data collected from the monitors over the Period during the baseline Noise Study that was not used in or described in the DEIR but used in the analysis.

5 Provide all raw data collected from the Monitors over the Period during the baseline Noise Study not presented in the DEIR and the basis for its exclusion.

6. For the baseline 2013 Noise Study and the subsequent noise analysis, was UPRR consulted to obtain average train and other related railroad activities and associated railroad and train potential noise and vibration sources over a 7x24 365 day period (e.g., the last prior yearly average)? If yes, provide all that information. If yes, provide any other information collected

from UPRR regarding its projected noise related activities for the next annual periods (including any information obtained regarding projections with no Project and with the Project).

7. Was UPPR advised directly or indirectly of the existence of the baseline study, the Period, the scope and purpose, location of monitors or any other related factors prior to the commencement of the baseline study and/or during the study? For purposes of this question, UPPR includes any of its representatives, employees, and independent contractors.

8. Provide a complete and accurate list of all construction equipment to be used in the construction phase of the Project.

9. For all construction equipment listed in response to RFIQ #8 above, provide the average daily duty cycle for each category of equipment, the typical noise emission levels for each item and estimates of noise attenuation from the construction site together with the location of such equipment within the site (e.g. Geometric center, multiple other locations).

10. Provide adequate description of type of engines that may be utilized during the operation of the Project, together with specific noise emission levels by type.

11. Provide noise emission levels for all Sources identified in Section 11.2.7 of this Response that are applicable to the Project. If any potential Source listed is deemed 'not applicable' provide explanation for such determination.

12. Describe in detail the Path between each Monitor and its impact on the Monitors' readings.

13. Describe in detail the make, model, new/used of each Monitor and if the Monitor is omnidirectional. Additionally describe how the microphone was positioned specifically to characterize which dominant noise Source.

14. Explain why other noise measures (Lmax, SEL, CNEL) were not used in the analysis.

15. Provide the noise levels generated by the operation of the unloading rack pumps (for avoidance of doubt, provide this level absent any other source. Do not combine this number with train movement).

16. Explain why Wilson, Ihrig & Associates was not disclosed in Chapter 7 of the DEIR.

17. Will Applicant (Valero) construct and/or operate the replacement hydrogen plant referenced in Section 5.4.3.10 of the DEIR? If yes, or undecided, explain the applicable timetable for such final decision and decision criteria.

18. Provide dimensions for the Project Site (construction) are identified as L-1 in Figure 4.1.-2 of the DEIR.

19. Provide specifics of placement of the Monitors and monitor sites for L-2 through L-6 (address, place of placement, height, type of building if applicable, etc.). Specifics should include any variables that would impact the results and measurements and data produced by the Monitors.

20. Were any buildings assessed for vibration/noise as a receptor? If no, explain why not. If yes, provide a list of buildings by address, type (construction), the results of the assessment inclusive of an analysis of the building's characteristics and such characteristics' impact on noise/vibration results.

21. Describe any existing road conditions in the construction site and each road's contribution to the noise/vibration analysis and levels.

22. Describe in detail the condition of all rail trackage within Benicia and the sensitive environmental areas inclusive of the Suisan Marsh.

23. Describe in detail for all crossing, turnouts, and switching areas in the Industrial Park area the general condition of the areas including but not limited to the identification of the type of switching or crossing track and any gaps, surface irregularities, or use of crossover frogs and any discovered configurations or other variables and factors that contribute to noise.

24. Can the City (or Applicant) guaranty (via contract or other similar binding mechanism) that the noise generated from the Project, and particularly the noise generated by and related to the movement of trains under the control of UPRR will be held to the levels promised and projected in the DEIR for the duration of the Project which can be reasonably expected to exist for several decades?

End of BSHC Section 11: Response to Sections 4.10 and 5.4.3.10 of the DEIR (NOISE)

SECTION 12: INSURANCE (SUBSTANTIVE AREA OF RISK NOT ADDRESSSED IN THE DEIR)

DEIR FAILS TO ADDRESS LIABILITY ISSUES AND INSURANCE COVERAGE FOR EVENTS WHICH ARE REASONABLY FORESEEABLE.

As previously discussed in this Response, transport of crude oil by train raises significant environmental and safety risks that have been dramatically demonstrated by numerous accidents, including the catastrophic destruction and evacuation of entire towns. Additionally, accidents related to the processing of such hazardous commodities can occur on any refinery's site, and such events regularly occur. Transport by rail greatly increases the already known and foreseeable risks associated with heavy petro-chemical industries. The recent record of destruction that has accompanied the rise of crude by rail, as well as prior decades of "routine" refinery mishaps, shows that accidents will be inevitable. Both non-catastrophic and catastrophic events are reasonable and foreseeable scenarios that must be examined under CEQA requirements.

Such occurrences, regardless of cause, have result in aftermaths including mass casualties, property damage, cleanup costs, costs for emergency response, evacuation costs for residents and workers in the impacted areas, and environmental damage. Damage may range from the destruction of a few rail cars to the elimination of entire downtowns. Environmental damage may range from a small cleanup in a contained non-environmentally sensitive area to the irreparable damage associated with the destruction of an entire sensitive eco system. The Refinery premises and UPPR rail associated with the Project are located in areas designated as environmentally sensitive; and the crude oil and tar sands may be transported over thousands of miles of track through other densely populated urban areas and sensitive environments before arriving in Benicia.

Therefore, it is imperative that the liability arising from entirely foreseeable accidents together with an examination of available insurance coverage for such accidents is thoroughly addressed in the DEIR. The DEIR avoids the examination of how damages might be paid just as it discounts such the full range of events and accidents that are foreseeable. The DEIR *does not* analyze: (i) the potential monetary damages associated with even the smallest spill, (ii) the financial ability of the responsible party to make the damaged parties 'whole', and (iii) the identification of parties who may not be made 'whole' and therefore left to absorb possibly catastrophic losses. From a local perspective, those left holding the bag and paying the legal bills may include The City of Benicia as well as individual residents and businesses
.

Recent train and refinery related accidents resulted in damages in damage claims of hundreds of millions of dollars. The town of Lac Megantic was essentially wiped out and the magnitude of damages associated with the accident resulted in the bankruptcy of the two responsible rail companies. The two railroad companies involved, one Canadian and one American, filed simultaneous bankruptcy petitions to seek protection. Each action resulted in liquidation of the company because it was determined that the company's obligations exceeded its assets. Restructuring was not possible. The valuation of the assets included any available insurance coverage. The total coverage amount inclusive of each company's assets was not

sufficient to meet the obligations. Creditor claims and claims of the many victims are still pending in the courts. The likely result is that most claimants will never be paid more than a fraction of their claims.

Concerns over inadequate insurance coverage for potentially huge damages associated with crude oil transport by rail has been recently raised by the Department of Transportation (**DOT**) via its agency, the Pipeline & Hazardous Materials Safety Administration (**PHMSA**). The concern may be characterized as a 'new' because the recent introduction of new crudes in large quantities (Bakken which is highly explosive; and Tar Sands which are highly hazardous to the environment if released) coupled with the recent steep spike in rail transport of such crudes that gives rise to the issue. PHMSA notes that even a less than catastrophic spill of crude oil will bump up against even the largest railroads' current insurance limits. (*see Draft Regulatory Impact Analysis [Docket No. PHMSA-2012-0082][HN-251] Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains; Notice of Proposed Rulemaking, July 2014)*. PHMSA also notes that as the volume of crude oil shipped by rail continues to grow, it is reasonable to assume that events of the magnitude of La Megantic may occur.

Even the Lac Megantic catastrophic explosion is not representative of the foreseeable maximum damages. The Lac Megantic explosion occurred in a small town in a rural area. This Project's footprint extends through many densely populated urban areas, and areas designated as environmentally sensitive throughout California. PHMSA attempted to estimate the potential damages if a Lac Megantic event occurred in a more densely populated area. One of their methodologies concluded that such an event in an urban area would produce roughly $6 billion in total undiscounted damages. A primary factor is higher population density, which puts more people at risk of exposure, injury or death, coupled with the value of property and infrastructure that will likely be destroyed.

According to the PHMSA analysis, most large railroads carry around $25 million in insurance; and although some companies might carry $50 million in coverage, even the highest existing levels are not adequate. The railroads' own trade associations are alarmed: the Association of American Railroads wrote a letter to the Canadian Transportation Agency regarding liability and insurance coverage for the movement of hazardous materials said that "should an incident occur within or near a densely populated area, or should there be a popular public attraction within a few miles of the incident site, an incident…has the potential to be truly catastrophic and result in billions of dollars in personal injury and property damages. The damages potentially resulting from an exposure could risk the financial soundness and viability of the rail transportation network in North America". (*see comments of the Association of American Railroads, Before the Canadian Transportation Agency, Review of Railway Third-Party Liability Insurance Coverage Regulations, January 21, 2014*).

The possibility of an accident involving crude oil and/or rail and/or tank pumping operations is real and the risk cannot be ignored. The accidents regularly occurring at the Richmond Chevron facility since 1989 are ample evidence that refineries are not immune from accidents. The damages resulting from the Chevron on-site events resulted in shelter-in-place orders, thousands of people seeking medical assistance, significant injuries of employee/first

responders, etc. Regardless of the track record of any particular facility, accidents do occur; and transport of crude by rail increases the risk far beyond the refinery property boundaries. Therefore, adequacy of insurance coverage should be examined. The introduction of the particularly hazardous and/or volatile crudes coupled with the new mode of transport (rail) and related new operations (pumping) for this particular Project, may challenge the adequacy of existing coverage of the Applicant. The Applicant's insurance coverage must be disclosed.

The DEIR must consider more than simply whether the Applicant and the railroad corporations can afford to pay for destruction of property (business, municipal, federal, state, individual), the destruction of sensitive environmental areas and wildlife, damage to health of citizens, loss of business and associated revenue, and/or loss of life. For purposes of insurance, such events must also be examined as cumulative events and include multiple events that may occur. A refinery may experience more than one accident in any year; and a railroad likely experiences many accidents in any annual period. Annual periods are emphasized here because an entity's insurance coverage/ policy is normally measured in 12-month increments. Therefore, any examination of coverage must take into account multiple occurrences (varying in type, degree, and amount of damages) within any coverage period. Several policies may overlap. Policies may have differing exclusions from coverage. Additionally, Earthquakes in California are foreseeable events. Therefore, *at the very least* any insurance coverage carried by the Applicant should be examined for exclusion of coverage related to any 'Acts of God' or 'Acts of Nature'.

The obvious foreseeability of accidents in connection with the Project raises two primary questions: 1) Who will be the liable party(ies) responsible for compensation associated with the deaths, injuries, property damage and environmental cleanup, and 2) Does the liable party(ies) possess enough capital, assets, or insurance coverage to compensate fully. An examination of past occurrences has demonstrated that a liable party 1) may not have sufficient funds to cover all damages and/or 2) may not have sufficient insurance coverage to meet the demands of the ensuing damages. Absent the funds to make damaged parties 'whole', such victims (human or property) are left without the means to meet medical bills, repair homes and businesses, clean-up any impacted environments, and generally put the post-incident state back to a pre-incident state. Additionally, government, public and non-profit agencies may be called upon to assist (especially in an emergency situation) and such assistors may not be reimbursed. These agencies may extend from the local Red Cross, to FEMA, the California Office of Emergency Services and other first responders. When the net worth of a company (inclusive of insurance) is insufficient to cover damages associated with an event, those costs will be ultimately borne by the parties who have suffered the injuries, damages and other consequences.

Even if examination is limited to a catastrophic event occurring *within* the "limited" Project boundaries described in the DEIR the potential losses are staggering. The fence line provides no protection from the worst accidents. The City of Benicia, its residents and businesses, the environment (inclusive of the sensitive Suisan Marsh, Sulphur Creek and wetlands), are all within the ambit of potentially enormous damage.[64] Even a "relatively" minor

[64] Examination of the consequences of accidents and events reasonably foreseeable have been primarily ignored or not discussed in the DEIR. Therefore, the growth-inducing, socio-economic and like consequences of a small and/or serious event have not been examined.

incident that occurs in or near the City may cause the release of deadly materials into the air resulting in evacuations, hundreds of hospitalizations, and future occurrences of cancer and lung disease in affected residents. Even a "relatively" small spill of crude oil into Sulphur Creek and/or wetland areas could result in permanent damage to environmentally sensitive systems and wildlife and irreparable damage. For an analysis encompassing the broader and more realistic Project areas (all of California), the consequences and dollar figures increase exponentially. Any DEIR involving an Applicant whose business plans can damage the entire state must include a robust analysis of their financial ability, inclusive of insurance coverage, to pay for damages in a cumulative fashion. One of the purposes of CEQA is to avoid having taxpayers foot the bill for business plans that go disastrously wrong.

Foreseeable events must also include the possibility of a terrorist or other intentional attack. Threats of disruption, particularly regarding transportation, are more or less constant from enemies outside the U.S. as well as from domestic sources. It is easily foreseeable that an individual or group may choose the railroad and/or a refinery as a target. The rail transportation system is an essential mode of transport within the United States for business. Indeed, a viable rail system has always been regarded as "core" infrastructure essential to the economic well-being of the country and a necessarily defended asset. A terrorist attack on a large scale (e.g. multiple refineries) would have a significant negative impact on the nation. So too, would the country be rocked by an attack involving rail cars carrying explosive crude oil through a big American city. Intentional attacks may originate not from a sophisticated, organized terrorist group. An intentional event may also include a group of minors attempting to derail a train car or penetrate a tank car. A scenario including explosion, derailment, tank car leakage or other incident caused intentionally is absolutely foreseeable. The risk should be taken seriously and thoroughly discussed.

CEQA review demands that reasonably foreseeable risks be fully revealed and analyzed. The federal government has recognized the risks of rail transport of crude oil as foreseeable and the preliminary analysis and public input that will lead to regulation of such risks. The DEIR also must analyze foreseeable risks, including inquiring whether that the entities found ultimately found liable for damages can afford to pay them. Full disclosure of the risk of underinsurance must be provided in the DEIR so that the City's decision makers and the public are fully informed of the potential cost to them. Such examination will require not only an analysis of each entity's financials, but also their specific insurance coverage and policies in effect. Additionally, this Project should be characterized as continuing not just for the construction phase but for the next several decades since the operational risks (on an off the Refinery premises) will reasonably and foreseeably continue far into the future. The City of Benicia should also examine mechanisms to impose reasonable minimum policy coverage, the monitoring thereof (e.g. then current certificates of insurance evidencing minimums established), and the mandatory re-examination and imposition of revised minimums to meet then current coverage needs. When the City wagers its future, it should know what it stands to lose.

RFIQS FOR SECTION 12 OF THIS RESPONSE. The following Requests for Information and/or Questions are submitted for this Section 12 of the Response (Insurance).

1. Provide a best effort list of all potential liable parties ("**Party**" or "**Parties**"), inclusive of Parties in a joint or severable liable capacity, for all reasonably foreseeable scenarios, including but not limited to the scenarios outlined hereinabove ("**Scenario**" or "**Scenarios**"), assuming that the event that triggers the liability, either originates from the transport and/or refinery operations associated with any crude oil that may be utilized for the Project (e.g. UPRR, Valero, subcontractors, rail car manufacturers, rail car leasing companies, seller/manufacturer of applicable crudes, a municipality, etc.).

2. For each Party listed in RFQI #1 above, provide the following:

(a) A copy of the Party's annual financials for the last two complete annual periods and any quarterly financials to date, inclusive of any SEC filings, together with said company's annual statement to stockholders (if a public company) or similar documents if privately held.

(b) A copy of each Party's current insurance coverage/policy. Detail should be provided regarding types of applicable coverage and other limitations (commercial general liability, excess liability, errors and omissions, limits per occurrence, combined and in the aggregate, etc.).

(c) An insurance risk analysis prepared by an insurance risk expert regarding coverage and limitations/exclusions for the purpose. Such an expert should be a neutral expert, with no ties to any of the examined Parties and chosen and managed by the Lead Agency.

(d) An analysis prepared by an expert in the respective Parties' industry, of the company's financials and the overall ability to pay damages for the purpose, absent insurance coverage and with insurance coverage. Such an expert should be a neutral expert, with no ties to any of the examined Parties and chosen and managed by the Lead Agency.

(e) Availability for each Party of "other" insurance coverage offered in the industry for the Scenarios examined, and an explanation of how such coverage, if available, would supplement current financial ability to pay damages together with a best estimate of damages that would remain uncovered.

3. For each Party listed in RFIQ #1 above, and for each Scenario, provide best effort worse case scenarios (multiple and single liability, singular and cumulative events) and for each event, the likely outcome (ability to cover all damages, or other).

4. Provide a best effort analysis for the Scenarios of the costs and categories of costs that any municipality, state government, federal government, county, city, or agency thereof ("**Government**") may need to provide to the public (residents or businesses) on a short term or long term basis and the likelihood and/or circumstances impacting such Government's ability to re-coop such costs from any source.

5. Provide a best effort analysis for the Scenarios of the costs and categories of costs that any resident and/or business in the impacted areas may need absorb at their cost and the likelihood and/or circumstances each residents' or business' ability to re-coop such costs from any source.

In your response, please address the standard provisions of residential homeowner insurance coverage, small business insurance coverage, large business insurance coverage and if damages arising from the Scenarios are covered completely under such standard individual's/business' coverage.

End of BSHC Section 12: Insurance

SECTION 13: BSHC GENERAL REQUESTS FOR INFORMATION AND QUESTIONS TO THE DEIR.

1. Provide complete copies of all contracts for or related to the engagement(s) of ESA and any of the subcontractors and/or experts (each a "**Contributor**") used in the preparation, development, writing, and/or analysis of the DEIR (each a "**Contract**"). For avoidance of doubt, a Contributor includes EAS (not inclusive of employees of EAS) and any subcontractors, all experts, and other third parties who were engaged by EAS or any other party and contributed to the DEIR.

2. For each Contract, provide any and all amendments thereto, whether written or oral, regardless of form, that amend, modify, or supplement the Contract and/or its terms including, but not limited to, terms of Scope. "**Scope**" means instructions, assumptions, dependencies, reliance, limitations (time, materials, other), authorizations, services descriptions, directives, resources, levels of effort, data, material and other tools used to define, characterize, shape, determine, the required performance of the Contributor under the Contract and/or for the engagement. For avoidance of doubt, Scope includes any materials or information provided to a party prior to the commencement of the Contract or engagement if such materials or information was utilized or relied upon by such party in the course of their duties under the Contract or engagement.

3. If any party, other than the contracting party,(each a "**Other Party**") communicated with a Contributor during, or prior to, the course of the engagement and such Other Party provided information, direction, instructions or other information that in any way or manner modified, changed or supplemented the terms of the Contract and/or Scope or provided further clarification, illustration, instruction, documentation, resources, or direction (i) identify such Other Party, and (ii) provide the specific communication(s), whether oral or written and regardless of form. For avoidance of doubt, an Other Party may include the City of Benicia, the Applicant, and/or UPRR.

4. For each Contributor, confirm that the engagement for such Contributor was made with the full knowledge (disclosure) and approval by the City of Benicia in compliance with its instructions and the City of Benicia's policies, rules, and regulations and any other applicable law and regulations.

5. For each Other Party, confirm that all communications, contributions and information and such Other Party's involvement were made with the full knowledge (disclosure) and approval by the City of Benicia in compliance with its instructions and the City of Benicia's policies, rules, and regulations.

6. For each Contributor, did the City of Benicia research the Contributor's prior performance to determine if such Contributor has, had or reasonably will have any ties to or reliance upon (economic, political, or other) the Applicant and/or UPRR?

7. For each Contributor, did the City of Benicia research, obtain and consider if the Contributor has reliance upon or may have reliance upon Applicant and/or the refinery-oil industry or UPRR and/or the rail road industry for Contributor's future revenue, earnings and/or reputation?. If yes,

how was this inherent bias examined and deemed irrelevant? By way of example and for avoidance of doubt, reliance includes any Contributor that is an expert or consultant with material ties to any University, agency, or group wherein such University, agency or group receives economic (i.e. grants) or other forms of contribution from Applicant, UPRR or their applicable industries.

8. For each Contributor, provide a list of all sources of "industry" income, private or commercial (inclusive of grants) including non-monetary contributions to each Contributor that any particular industry source may have provided (i.e., travel, conference fees, accommodations)for each Contributor (or, each Contributor's employer if applicable, such as a University), each a "**Source**").

9. Identify any party who was considered for the engagement (each a "**Candidate**"), but not chosen to be a Contributor.

10. For each Candidate, describe fully how each Candidate was first sourced (i.e., who first identified such party as a potential Candidate, and/or did the Candidate respond to a formal Request for Proposal or similar procurement request, or other process (each a "**Process**").

11. For each Process, identify the party (i.e. City of Benicia, Applicant, ESA, or other party), that made the final determination and selection of any Candidate to be engaged as Contributor (each a "**Decision Maker**"). If the Decision Maker was the City of Benicia, identify who and/or which city entity was the ultimate Decision Maker.

12. For each Process, identify any party, other than the Decision Maker, that contributed to, was relied upon, and/or substantially influenced the vetting and analysis of each Candidate and describe specifically scope and level of such party's involvement.

13. For each Process, provide all documentation exchanged in the Process with any involved party, inclusive of the Candidate. If the City of Benicia was the Decision Maker and utilized a formal procurement process, please provide the ratings applied to each Candidate.

14. Confirm that each Process (inclusive of the methods and criteria of selection) were made with the full knowledge (disclosure) and approval by the City of Benicia in compliance with its instructions and the City of Benicia's policies, rules, and regulations and any other applicable law or regulations.

15. What specific steps did the Decision Maker invoke to determine the eligibility and qualifications of any Candidate and their ability to perform to the tasks required?

16. Did the Decision Maker examine and verify a Candidate's prior performance using independent methods and sources (i.e., non-reliance on parties involved in or with current or past ties to the Project – objective sources) and if yes, identify such steps?

17. Identify all parties, excluding a Contributor or the City of Benicia, that received a copy of the DEIR, in whole or in part, prior to its public dissemination and describe the specific content provided to whom and by whom.

18. Provide any other information regarding the process and selection of a Contributor that is salient in determining or disclosing any inherent bias in the process and selection of a Contributor.

19. Can the Applicant control, guaranty or otherwise ensure that UPRR will abide by Applicant's projections and plans regarding the frequency, route or configuration of shipments of crude oil?

20. Can the Applicant control, guaranty or otherwise ensure that UPRR will abide by Applicant's projections and plans regarding movement, parking and switching of trains outside of Applicant's property?

21. Can the Applicant control, guaranty or otherwise ensure that UPRR will abide by Applicant's projections and plans regarding the volume of train cars arriving and leaving the Industrial Park outside of Applicant's property?

22. Can the Applicant control, guaranty or otherwise ensure that UPRR will abide by Applicant's projections and plans regarding the use of any particular type of rail tank car used in the configuration of trains delivering crude oil to the refinery?

23. Did the City of Benicia review all scoping and related comments and questions previously submitted (see Appendix B of the DEIR) and respond and address fully in this DEIR?

24. Specifically describe the "1232 Tank Car" proposed in the DEIR. Is this 1232 Tank Car the car known as the "Enhanced CPC 1232 Tank Car" with the 7/16 inch minimum shell thickness or the "AAR 2014 Tank Car" with the 9/16 inch minimum shell thickness? Confirm that the DEIR referenced 1232 Tank Car does not have the TIH top fittings protection system or the ECP brakes.

25. The DEIR indicates that the tank cars used to transport the crude would be owned or leased by Applicant.

a. What it the total number of tank cars leased plus owned) that will be procured?
b. What is the total number of tank cars that will be leased?
c. What is the total number of tank cars that will be owned by Applicant?

26. For tank cars subject to lease, does Applicant currently have contracts in place or binding options to lease, the total number of cars referenced in Section 25(b) above? If yes, provide the names of the lessor entity(ies), confirm that the lessor will supply (binding engagement) all leased 1232s, and confirm when such tank cars will first be available.

27. For tank cars subject to Applicant ownership, does the Applicant currently have binding contracts and orders in place for such 1232 cars? If yes, provide the manufacturer and/or seller together with the current scheduled delivery dates for each tank car.

28. Provide a best estimate of the minimum number of tank cars required for the Applicant to operate per the Project Alternative 2 proposed requirements in the DEIR, specifically, 7x24, 365 operations with 100 tank car deliveries to the Refinery daily. Include the number of tank cars in route (either coming or going), the approximate location of such tank cars along the route commencing from and then returning to the source of the crude oil, the approximate number of miles each way, the approximate timing for the trip each way.

29. Confirm that Applicant can control 100% the use of the 1232 cars, and no others, from point of crude collection to final destination (Refinery).

30.Identify all devices ("**Devices**") installed on all points of the rail within California ("**Routes**"), for all trains carrying crude oil to the Refinery that are utilized to detect train defects and other conditions that pose hazards to trains. Devices include, but are not limited to, Wayside Defect Detectors and Positive Train Control systems. For each Device, provide the specific location along the Route and provide a detailed map. For each Device, describe specifically the type, manufacturer, age and the specific range of functionality.

For Wayside Defect Detectors, specify if such Devices include any or some of the following functionality:

Hot bearing detectors,
Dragging equipment detectors,
High, wide or shifted load detectors,
Acoustic bearing detectors,
Railway bearing acoustic monitors,
Truck bogie optical geometry inspection systems,
Truck performance detectors,
Wheel impact load detectors, and
Wheel profile measurement systems.

For Positive Train Control Systems, specify if each unit has the following components:

Speed display and control unit on the locomotive,
A method to dynamically inform the speed control unit of changing track or signal conditions,
On-board navigation system and track profile database to enforce fixed speed limits,
Bi-directional data link to inform signaling equipment of the train's presence,
Centralized systems to directly issue movement authorities to trains,
A Fixed signaling infrastructure (coded track circuits and wireless transponders), and
Wireless data radios for transmission.

End of BSHC Section 13: General Requests for Information and Questions

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